TECHNOLOGY DEPT.

First Copy

A National Newspaper for Every Branch of the Industry

Automotive Daily News

CARS · SHOP EQUIPMENT · TRUCKS · AVIATION · PARTS · ACCESSORIES · TIRES

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PUBLIC LIBRARY MAR 19 1932 DETROIT

Dodge Rounds Out Truck Line With Low Price Light Models and New 4 Tonners

New 1½-Ton Four-Cylinder Unit at $525 Sets New Low Price for This Capacity Truck In Dodge Line

Detroit, March 17.—Dodge Brothers has further augmented its truck line with a 1½-ton, four-cylinder model priced at $525, the lowest price ever placed on a Dodge truck unit of this capacity. The line also includes a 1½-ton six-cylinder model priced at $585. Completing the low priced trio is a half-ton four-cylinder delivery job to sell at $375.

This half-ton model includes full force lubrication and hydraulic brakes. The new offering also includes a heavy duty 4-ton line.

The 1½-ton four-cylinder model engine has full pressure lubrication, light weight steel strut aluminum alloy pistons, positive pump cooling and new inserted high speed tool steel valve seats said to prolong valve life and materially lower upkeep costs. Full floating rear axle, single plate clutch, weatherproof internal expanding hydraulic brakes and long-wearing cast cylinder iron brake drums are included in this low-priced model.

Shackles of the "shock-proof" type are used on both front springs of this model to prevent transmission of road shocks to the driver through the steering column.

On the heavy duty line the outstanding features of the two-ton model are its ten-inch frame with

(Continued on Page 4)

WILLYS REGAINING STOCK CONTROL OF WILLYS-OVERLAND

New York, March 17.—Stock control of the Willy-Overland Company is expected to revert to John N. Willys and associates on July 1 as a result of voting provisions that vest priority rights in the preferred stock after the omission of four quarterly dividends.

Mr. Willys is chairman of the company and he and his associates own the majority of the preferred

(Continued on Page 4)

GOODRICH OFFICIAL URGES IMPROVEMENT FOR SALES METHODS

Detroit, Mich., March 17.—"With product quality far above that of any previous era and commodity prices considerably lower than in recent years, the buying public now receives real value for its money when purchasing nationally known merchandise," says Philip J. Kelly, assistant general sales manager of the B. F. Goodrich Rubber Company, who was in charge of that company's retail tire dealers' conference in the Book-Cadillac Hotel here yesterday, attended by 350 tire dealers and automobile and oil company executives.

Summing up his observations on a coast-to-coast survey just completed, Kelly stated that general business conditions appear improved and that only the industries and retailers who have not adjusted

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February Commercial Car Sales In 16 States 38% Below 1931

Inactivity of Ford Resulting in 56% Sales Decline in Ford Trucks Seen as Big Factor In Total Drop

Detroit, March 17.—R. L. Polk & Co. have just released figures covering commercial vehicle sales in sixteen states for the month of February, 1932. The total truck sales in this territory are 3,347 units, which compares with 5,413 commercial sales in these sixteen states in February, 1931. This represents a decrease of slightly over 38 per cent.

During the entire month of February, 1931, commercial vehicle sales totaled 23,475 units. If the present ratio of sales, 38 per cent. under last year's, holds for the other thirty-two states and the District of Columbia, the total for February, 1932, will be approximately 14,555 units.

As an indication of how far the decreased sale of Ford truck units is responsible for the general decline in February this year, the following figures are interesting:

In the sixteen states so far reporting Ford truck sales totaled 1,079, as against 2,494 units sold in the same territory in February, 1931. This is a decrease of more than 56 per cent. If that ratio holds for Ford sales in

(Continued on Page 6)

G. M. TESTS PLAN TO BOOST SALES OF USED TRUCKS

Indianapolis, Ind., March 17.—A ten days' used truck sale is being staged here by officials of the General Motors Truck Company in a test campaign to determine effectiveness of a plan to dispose of surplus trade-ins at factory branches.

H. T. DeHart, advertising manager, and V. M. Babcock, Eastern sales promotion manager from the Pontiac factory, along with a representative of the Campbell-Ewald Company, are co-operating with L. C. White, branch manager here, in the conduct of the sale. Used trucks are being extensively advertised at half price, with every machine thoroughly reconditioned.

"This sale is the first of a series of its kind planned in leading cities this spring," Mr. DeHart said, "and is in keeping with the reconstruction movement of the Federal government. Prices have been scaled to a point believed attractive to the buying public and unusual opportunity is offered to purchase many thousands of miles of reliable transportation at a minimum cost, a feature which we believe will carry particular appeal at this time.

"We feel that the need for hauling equipment during the coming year will be very decidedly stimulated, and it is with a view to clearing our used truck departments of surplus materials in order to permit freer dealing in the new car division that these sales are being staged."

A. P. SLOAN REPORTS ON 1931 OPERATIONS OF GENERAL MOTORS

New York, March 17.—President Alfred P. Sloan of General Motors today made public his report to stockholders of the organization, covering the operations of 1931. Interesting features of the report follow:

"Net earnings from operations for the year 1931 were $115,220,507. From these earnings must be deducted extraordinary and non-recurring losses other than those of an operating nature (dealt with in greater detail elsewhere in this report) in the amount of $20,574,514, which, after taxes, etc., would be equivalent to $18,343,400. Net earnings of the year available for dividends, therefore, amounted to $96,877,107. After paying regular dividends on the preferred stock requiring $9,375,899 for the year, there remains $87,501,208, being the amount earned on the common shares outstanding, equivalent to $2.01 per share. Net operating earnings available for common dividends before provision for extraordinary and non-recurring losses referred to were equivalent in 1931 to $2.43 per share. Comparable net operating earnings for the year 1930 were $141,616,131, equivalent, after preferred dividends, to $3.04 per share. In 1930 there was reported a non-

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BUICK SPRING DRIVE OPENS IN N. Y. CITY

New York, March 17.—Delivery of 3,200,000 pieces of literature, introducing Buick's new 3,500-pound $995 sedan, will be made by Western Union messengers in 1,650 cities and towns including New York today and March 21-22, it was announced yesterday by A. E. de Loach, New York branch manager of Buick Motor Company.

This is the largest of all the nation-wide deliveries ever made by special messenger service. It required the employment, training and uniforming of 5,000 extra messengers for three days at an extra labor expenditure of about $65,000.

In the metropolitan area which

(Continued on Page 2)

KEY CITY MARCH SALES OFF; SOME CENTERS TO FEBRUARY

New York, March 17.—First returns on Automotive Daily News' customary check-up of key city sales for the first half of the month, show March running considerably behind the same period last year.

Ramsey county, Minnesota, in which is located the city of St. Paul, reports passenger car sales for the first half of March totaling 156, with 21 trucks also disposed of. This compares with 151 passenger cars and 42 trucks sold during the first half of February. It also compares with 464 passenger cars and 53 trucks sold during the first half of March, 1931.

Louisville, Ky., reports sales of 125 passenger cars in the first half of March, as against 163 sold in the first half of February.

Los Angeles, Cal., up to the tenth

(Continued on Page 10)

Federal Truck Shipments In Feb. Up 225% Over Jan.

Detroit, March 17.—"Shipments of Federal trucks in February, 1932, showed a 225 per cent. increase over January," says Henry Krohn, vice-president in charge of sales of the Federal Motor Truck Company.

According to Mr. Krohn, these orders came from practically all parts of the country and from many industries. The business was also well diversified so far as type of equipment is concerned. Medium and heavy-duty vehicles held their own, along with a brisk demand for Federal's new low-priced 1½ ton models and six-wheel vehicles. Evidently the replacement business covers considerable territory and is quite likely to develop on a satisfactory scale.

"It seems evident," continued Mr. Krohn, "that the long deferred purchase of haulage equipment is now under way. This should mean a good year for the truck business. Furthermore, since transportation is the life blood of industry, and any business improvement is quickly reflected in a growing demand for transportation facilities, this seems to indicate a general upturn all along the line."

TO A. D. N. READERS AND ADVERTISERS

All offices of Automotive Daily News, advertising, editorial and circulation departments, are closed all day every Saturday and Sunday throughout the year.

FRANKLIN BODY SHOP COMPLETES FIRST UNIT

Syracuse, N. Y., March 17.—First production from the new body shop of the H. H. Franklin Manufacturing Company was completed Tuesday, less than two months after plans were approved for this addi-

(Continued on Page 4)

Auburn Will Launch Dual Ratio Demonstration Week

Auburn, Ind., March 17.—Promising not to try to sell riders a car, Auburn Automobile Company will inaugurate a nation-wide dual ratio demonstration week from March 20-27, N. E. McDarby, vice-president in charge of sales, announces.

These seven days have been set aside by Auburn distributors and dealers throughout the United States to be devoted exclusively to acquainting motorists with the new standards of operating efficiency made possible by this major advancement.

"We are making this program entirely educational because of the trenmendous interest dual ratio has evoked in the last three months," Mr. McDarby said, "and because we realize that thousands of interested motorists hesitate for fear of imposing on us to request a demonstration when they were not in the market for a car. This is one of the chief reasons for the dual ratio demonstration week.

"The purpose of this campaign will be to demonstrate how the Dual Ratio equipped Auburns are able to outperform all other cars, with an amazing economy of operation; how Dual Ratio minimizes noise and vibration, affording an unexcelled smoothness which results in longer life because of reduced wear and strain on moving parts, and consequent greater resale value, and how, by turning a small lever on the dash, the driver has a car built for acceleration and hill climbing and by an opposite turn of the lever another car designed especially for the straightaway."

Tests will be made during the week, he said, to determine the acceleration of the Dual Ratio equipped Auburns and their performance on hills. All of these tests will be made in public and carefully checked by competent officials out-

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Buick army of Western Union boys lined up in New York city, ready for the Big Buick Battle for Business

BUICK SPRING DRIVE OPENS IN N. Y. CITY

(Continued from Page 1)

covers the five boroughs and adjacent New Jersey towns alone, it will be necessary to use 1,000 messengers to deliver the quota assigned for this territory. The task called for the employment of 600 messengers in addition to the regularly employed force in order to expedite distribution.

About 180,000 pieces of literature will be personally delivered today and another 180,000 on March 21 to car owners in Buick's price class. To somewhat illustrate the magnitude of this task, this literature is found to weigh 50,000 pounds, or a little over twenty tons, to be distributed in two days. The literature for the entire country weighed over 200 tons.

The routing and zoning of such a large delivery required special handling. An entire floor in the Western Union building was devoted to this task and an assembly line resembling Buicks own production line had to be installed. Western Union has in the past two or three years handled deliveries to a million or more people, but this is the largest ever made.

Western Union offices in 1,650 towns and cities are busy today handling the extra delivery load. They are using 15,000 regular messengers and the 5,000 extras. Buicks will be used in suburban areas to augment other motive equipment. Chicago is the next largest delivery with 65,000; followed by Detroit with 60,000.

NEW MIDGET CAR SEEKS BACKING IN CANADA

Montreal, March 17. — Manufacturers of a French midget car, the Micron, are contemplating opening an assembly plant in Montreal if they can interest local financiers to put up $50,000 capital to add to their own funds.

Two of these bantam cars, powered by one cylinder engines and of light appearance, are on view at the Motordrome, but an admission fee of 25 cents is charged. An agent estimated that if the cars could be assembled here it would be possible to retail them at around $250, or less than half the cost of the lowest priced bantam model at present sold in Canada.

HUPMOBILE SHOWS LOSS FOR 1931 OPERATIONS

Detroit, March 17. — Report of Hupp Motor Car Corporation for year ended December 31, 1931, shows net loss of $4,249,127, after taxes, depreciation and other charges, including adjustment of inventories and commitments. This compares with net loss of $922,765 in 1930.

Current assets as of December 31, 1931, including $7,095,977 cash and government securities, amounted to $11,926,407, and current liabilities were $1,715,296. This compares with cash and government securities of $9,913,717, current assets of $16,172,858 and current liabilities of $1,728,158 at close of 1930.

AUBURN INCREASES ALL PRICES BY $100

Auburn, Ind., March 17.—An increase of $100 each on all new models, effective April 15, was announced here today by the Auburn Automobile Company. New listing under this increase will be as follows:

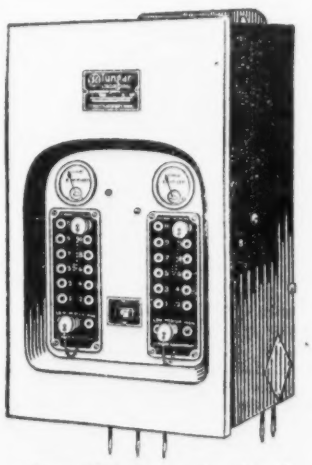
8-100 Standard 127-In. Wheel Base	
Business coupe	$945
Five-pass. two-door brougham.	995
Four full sedan	1,045
Custom type cabriolet	1,095
Five phaeton sedan	1,195
Speedster	1,195
Seven sedan, 136-in. w. b.	1,245
Cust. 8-100 Dual Ratio 127-In. W. B.	
Business coupe	$1,145
Five-pass. two-door brougham.	1,195
Four full sedan	1,245
Custom type cabriolet	1,295
Five phaeton sedan	1,395
Speedster	1,395
Seven sedan, 136-in. w. b.	1,445
12-160 Standard 133-In. Wheel Base	
Business coupe	$1,445
Five-pass. two-door brougham.	1,495
Four full sedan	1,545
Custom type cabriolet	1,595
Five phaeton sedan	1,695
Speedster	1,695
Cust. 12-160 Dual Ratio 133-In. W. B.	
Business coupe	$1,645
Five-pass. two-door brougham.	1,695
Four full sedan	1,745
Custom type cabriolet	1,795
Five phaeton sedan	1,895
Speedster	1,895

Owners of battery charging establishments who are successful in spite of the times are, of necessity, careful buyers.

When they buy shop equipment it must be good, it must produce, it must last.

This explains why two out of every three battery chargers in the successful shops today are

TUNGARS



Since 1916 Tungar has helped bring a high battery charging profit to dealers. A new, modern Tungar can do the same for you. Write for the facts about G-E Tungar to Section A-1023 Merchandise Dept., General Electric Company, Bridgeport, Connecticut

GENERAL ELECTRIC

AUTOMOTIVE PRODUCTS

MERCHANDISE DEPARTMENT, GENERAL ELECTRIC COMPANY, BRIDGEPORT, CONNECTICUT

SPARKS *from* DETROIT

Buick Building Business

* * *

Michigan Club Busy

* * *

Buy, Buy Baby—Bonds

* * *

Publicity Pays

* * *

Chris Sinsabaugh—Detroit Editor

ONE cannot help but admire the thoroughness of the publicity campaign which is being waged this week, opening up Buick's spring sales effort. Seemingly, Emerson J. Poag, who directs the advertising, in addition to wearing the toga of assistant sales manager, has not overlooked a single point in laying down an ink barrage behind which Buick's army of salesmen is advancing on the 1,600,000 prospects. Newspapers, magazines, radio, outdoor posters, direct mail, window displays—all have been invoked to carry the message from Flint.

Most unique of all methods used, however, is the clever scheme of enlisting the Western Union messenger service to deliver to each and every one of these 1,600,000 a special catalog, giving complete information of the Buick Series 50 line. The boys started on this yesterday and will finish their work tonight.

* * *

TO GIVE THE DEVOTED READERS of the column an idea of the job that is being done, let me tell you that the bombardment started Sunday with a broadcast over a coast-to-coast network of radio stations, which will be repeated next Sunday night. Fifteen thousand five hundred posters were plastered on the boards on Tuesday and, simultaneously, Buick dealers all over the country placed special displays in their show windows.

The newspaper advertising started Tuesday also, with more than 2,000 dailies carrying the message, while the magazine schedule includes a broad list of general and farm publications.

Most unusual is the fact that although Buick makes twenty-six models, the entire program is based on one car and one brief message, "Don't buy any car until you see Buick's 3,500-pound $995 sedan, now on display at your Buick dealer."

* * *

HERE IN DETROIT we look on the Automobile Club of Michigan as part of our industry, it's so helpful in advancing the cause of improved highways, traffic control and the like, all of which means sales for the manufacturers and dealers. In recognition of this co-operation, the column is passing along to you the gist of the annual report of Dick Harfst, general manager, which will give you an idea of the value of up-to-date automobile clubs to the industry.

With a membership of around 80,000, the club added 30 per cent. to its territorial area the past year, so that it now takes in practically the whole state of Michigan. In servicing this membership, it spent $100,142 in 1931 in the emergency road service department, answering more than 100,000 calls for help. It has more than 500 units in its state-wide service fleet, subject to call twenty-four hours a day for members.

In the matter of dispensing road information, the club answered 5,000 more touring inquiries than in 1930, more than 700,000 touring inquiries, maps and log requests being handled.

* * *

THE WAY "BABY" BONDS are moving at the Detroit banks is most encouraging to the automobile industry, for the demand for them is taken to mean that the anti-hoarding campaign is winning out and that the people are taking the dollars out of the old sock and putting them to work. With money moving this way, motor car salesmen feel they have a fighting chance to get some of it.

* * *

TWO ORDERS for Ted Brownell's Text Book for used-car salesmen came through as a result of the column's review of that interesting publication. We have another chance, too, to brag of the reader interest, for following the story of how Briggs Body is diversifying its product by manufacturing porch chairs, we have had a request from a New York state Ford dealer to have chair catalogues forwarded to him.

Night Loading Helps Fleet Owner Cut Unit Operation; Reduces Accident Costs

Gimbel Brothers, New York department store has reduced its truck unit operation cost 21.4 per cent. from a year ago by the installation of a night loading procedure, according to Avery Allen, superintended of the Gimbel warehouses.

"Most delivery units pick for their representatives men who are stable, sincere and, if possible, men with families," says Mr. Allen. "What, then, will be the driver's and helper's reaction to being able to return to his home and family life earlier in the day? It is quite obvious his attitude toward his work will be decidedly better, and it is also obvious that the reaction of his family will be more conducive to satisfaction and happiness in his particular duties.

"Driving conditions during daylight hours are decidedly better. The driver has a better chance to make a good accident record, and, if a bonus-incentive plan is used, he has a much better chance to increase his earning capacity by his no-accident accomplishments. This once more reflects itself into his home and family life, as well as his personal earning power.

"With even distribution of the trucks occasioned by loading in the afternoon and evening, the driver and helper are assured of more immediate assistance, and consequently the time that it is necessary for him to spend in reloading his truck for the following day is decidedly less. This decreases the working time of both driver and helper and tends toward a much better working condition in the delivery department.

"Damages, which necessitate extra workroom expense, time, customers' complaints, and which are decidedly important, are likewise less, due to the unhurried loading of trucks in the late afternoon or evening. Under the night loading arrangement, a driver can take as long as he wishes, be as careful as he wants, can arrange his load to his satisfaction, and can carefully inspect each piece before putting it on his truck. Regardless of how much time the driver may take to do this, the customer is in no way affected, since his deliveries for the day have already been completed. With this added care in handling, the result must be toward fewer damages. As in the case of returns, Gimbel Brothers has enjoyed a substantial decrease in the number of damage complaints in 1931 against 1930, in which latter year no night loading was done.

"Protection is an item for consideration, and when drivers are able to begin their deliveries to the customers at an early hour, it is quite obvious that there is less possibility of theft or hold-up.

"In the same way, there is decidedly less possibility of accident during daylight hours than there is after sundown. Traffic, for the most part, is less active in the early morning because of the fewer number of pleasure cars on the road. The driver in the early part of the day is much more apt to be completely awake, his reflexes are better, and, consequently, he is in better position to avoid accidents which may be very costly to himself and to the store he represents.

"Practically all furniture delivery units maintain some form of loading assistance for the driver and helper. Some even go so far as to load the vehicle for him, leaving him free of responsibility when once he has checked in his returns, reported his cash and turned over his truck to the department. There is no question that, when all the trucks in operation are being loaded with merchandise at one time, there is a decided necessity for maximum assistance from loaders and load checkers. This fact is eliminated by night loading, in that the trucks are loaded as they come in from the routes rather than all at one time, as would be the case in morning loading.

"Regardless of the size of the delivery unit, the amount of loading and load-checking time is obviously less concentrated and, further, obviously less expensive when the work is so spread out. Any store that is at the present time giving loading or load-checking assistance to the driver and helper can effect a very definite economy by spreading out over a greater period of time a few loaders or load checkers rather than having a greater number in a more concentrated operation.

"Loading supervision is decidedly much better when the congestion of morning loading is done away with. Supervision then becomes more individual, and, being thus spread out, tends toward a more common agreement of standards between the supervisor and the driver and helper. This closer relationship brings with it a general grading up of driver and helper toward a higher individual standard and toward a standard more conducive to a high common average. This fact may be well measured by a close and accurate record of the average pieces on a truck."

STERLING TRUCK NAMES TWO NEW DISTRIBUTORS

Milwaukee, Wis., March 17.—The Sterling Motor Truck Company announces the appointment of two new distributors, the A. L. Weed Company, Bangor, Me., and J. H. Meyer & Sons, South Albany, Ind.

WESTERN AUTOMOTIVE PARTS MEETING MAR. 24-26

Los Angeles, March 17.—The Western Automotive Parts and Equipment Conference will meet at the Biltmore Hotel, March 24-26. This is the third annual meeting of Western parts jobbers. Sol Smith, 240 West 18th St., is executive secretary.

Rognon Presents Paper on Parts Distribution Methods

New York, March 17.—**At a meeting of the committee on plans of the Eastern Automotive Parts Terminal, held here yesterday, Ralph C. Rognon, chairman of the committee, presented a paper outlining plans for improving methods of parts distribution in the East.**

The meeting was attended by representatives of seventeen companies, indicating a wide interest in improved distribution, the need for which Mr. Rognon brought out in his paper.

It is generally admitted that parts distribution ought to be more efficiently handled, and Rognon's plan involves the use of the Eastern Automotive Parts Terminal, by means of which many advantages accrue to the manufacturer of vehicles, the dealer handling them and the service station repairing them.

The discussion brought out the fact that availability was the important item in an efficient distribution program and that by a collective movement an effective merchandising program could be inaugurated.

Following are the companies that were represented:

Auburn Automobile Company, Dodge Motor Car Company (passenger car division), Dodge Motor Car Company (truck division), Reo Motor Car Company (passenger car division), Nash Motors, Olds Motor Works, Plymouth Motor Car Company, Willys-Overland Company, Mack Truck Company, Diamond T, General Motors Truck, Autocar Company, Brockway Motor Truck Corporation, Reo Motor Car Company (truck division), Waukesha Motors, International Harvester, Armour Company and Shell Petroleum.

KARI-KEEN REPORT READY BY MARCH 21

Sioux City, Ia., March 17.—Hearing on report and account of the Kari-Keen Manufacturing Company receivership has been set for March 21. Proved claims total $501,-199.15, with cash on hand of $105,-589.18. H. M. Kirkman and I. M. Llon, receivers, reported receipts of $149,513.31, including $110.000 recently paid by the Gabriel Company, Cleveland, for the plant.

Disbursements by the receivership have totaled $43,924.13. Luggage carriers, heaters and shutters worth $55,146.25 were sold, but the receivers collected only $37,853.62, the balance being taken over with the receivables assigned the Gabriel concern. Claims against the concern total $514,659.25, the approved claims including $119,745.69 against the Irving Manufacturing Company, a subsidiary.

TAX ADMINISTRATION SUGGESTIONS SOUGHT FROM CAR PRODUCERS

New York, March 17.—Suggestions for administering the proposed Federal general sales levy on products of the motor industry in the event of its enactment, were sought today from manufacturers by the taxation committee of the National Automobile Chamber of Commerce.

All automobile, parts and accessory makers were requested by the motor chamber to consider the effect which adoption of the proposed levy would have upon their business operation.

While the chamber has not yet formulated an official policy with respect to the sales levy, its taxation committee has submitted a memorandum to the membership, explaining those sections of the proposed bill of greatest concern to the industry.

All vehicles and accessories and replacement parts sold in the United States, except those the government purchases, will be subject to a levy of 2¼ per cent. of the wholesale price, according to the committee's interpretation of the bill.

No tax would be assessed on freight, insurance and added distribution charges. Parts and accessories purchased by manufacturers for installation on their vehicles would be exempt under the provisions of the bill.

Rebates on repossessions would be allowed providing the manufacturer offers evidence of the bona fide character of his claim.

According to the committee's understanding of the measure, the levy would not apply on vehicles, parts or accessories produced for export consumption.

Imports into the United States would be taxable at the same rate as domestic products, in addition to such tariff duties as exist or might be enacted.

MARCH TRUCK SALES BETTER, KROHN TELLS FEDERAL DEALERS

Detroit, March 17.—"The month of March promises to show a very definite gain over February, which in turn showed an increase of 225 per cent. in shipments over January," Henry Krohn, vice-president in charge of sales of the Federal Motor Truck Company, told distributors in Michigan and adjacent territory at the two-day regional sales meeting here this week.

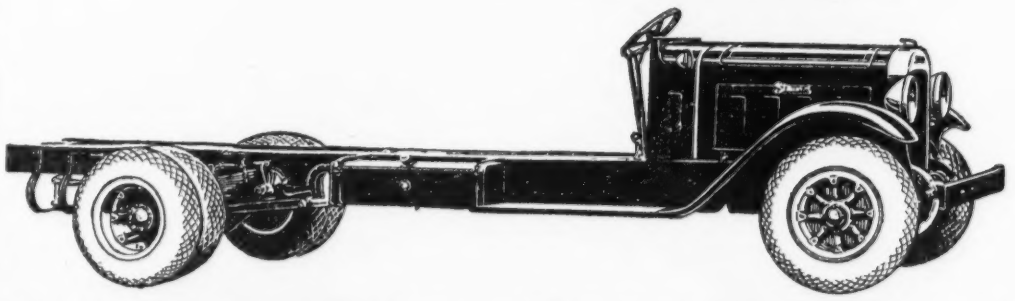
This was the first of a series of meetings and field activities included in Federal's extensive merchandising program for 1932. Similar gatherings will be held in Boston, New York and Chicago.

Mr. Krohn also told the meeting that Federal distributors from all points are reporting a large number of deals in process of development, while many of the distributing organizations already have hit a healthy stride in actual sales.

TEN NEW JOBBERS TAKE ON RED HEAD HEATERS

Ten new jobbers have recently added AP mufflers and Red Head Heaters to their line. These new Associated Parts jobbers are City Auto Company, Bridgeport, Conn.; Christiansen Auto Parts, Kankakee, Ill.; Fort Wayne Piston Service, Fort Wayne, Ind.; Moore Parts, Inc., South Bend, Ind.; Sturgis Auto Supply, Sturgis, Mich.; Wolverine Auto Supply, Three Rivers, Mich.; Van Wert Motor Supply, Van Wert, O.; Triangle Gear and Piston Rings Company, New York city, N. Y.; Motor Accessories Company, Allentown, Pa.

The 1932 STEWARTS



Honest Trucks - - Honestly Rated
Honestly Priced

Stewart's long established leadership in truck value is again evident in 1932. Handsomer in appearance, more rugged, more powerful, the 1932 Stewarts are marked by improvements in engineering principles and design that place them far in advance of all truckdom.

If you are looking for a truck that will stay on the road and out of the repair shop—whose average life is 5 to 10 years or more—see the 1932 Stewarts. They are honestly rated, honestly priced, honestly built for many years of constant, faithful service. If your trucking requirements demand many miles per day, you will find the new Stewart 8's unequalled for performance, economy and dependability. Free Catalog upon request.

3 NEW Stewart 8's
2½ ton—$2390 Chassis
3 ton—$2990 Chassis
3½ ton—$3990 Chassis

MODELS

	Bevel Axle	Chassis Prices
1	ton, 4 Cylinder	$ 695
1	ton, 6 Cylinder	795
1½	ton, 6 Cylinder	995
2	ton, 6 Cylinder	1195
2	ton, 6 Cylinder	1695
2½	ton, 6 Cylinder	1990
2½	ton, 8 Cylinder	2390
3	ton, 8 Cylinder	2990
	Worm Axle	
*3	ton, 6 Cylinder	2990
*3½	ton, 6 Cylinder	3690
*3½	ton, 6 Cylinder	3990
*3½	ton, 8 Cylinder	3990
*5	ton, 6 Cylinder	5190
*7	ton, 6 Cylinder	6190

Double Reduction or Worm Rear Axle Optional
All Prices f.o.b. Buffalo, N. Y.

Stewart MOTOR TRUCKS
STEWART MOTOR CORPORATION
BUFFALO, N. Y.
Stewart Truck Corporation of Canada, Limited, Fort Erie, Ont., Canada
Cables: Stewartruk Buffalo
Codes: Acme, Bentley's (Complete Phrase) Bentley's (Second Phrase), Universal Trade Code, A. B. C. 5th Imp. (5 and 10 Letter)

Honest Trucks-Honestly Rated-Honestly Priced

Dodge Brothers Rounds Out Commercial Car Line

(Continued from Page 1)

box cross members and its ninety-six horse power high speed truck engine.

The three-ton Dodge heavy duty model is designed to give power ample for all ordinary service, with plenty in reserve for emergencies.

Vacuum type booster brakes are used.

Powered with an eight-cylinder 115-horse power modern high speed engine, the Dodge 4-ton truck has a pay load capacity of 15,000 pounds in use as a truck and 50,000 pounds gross when used as a tractor with trailer or semi-trailer.

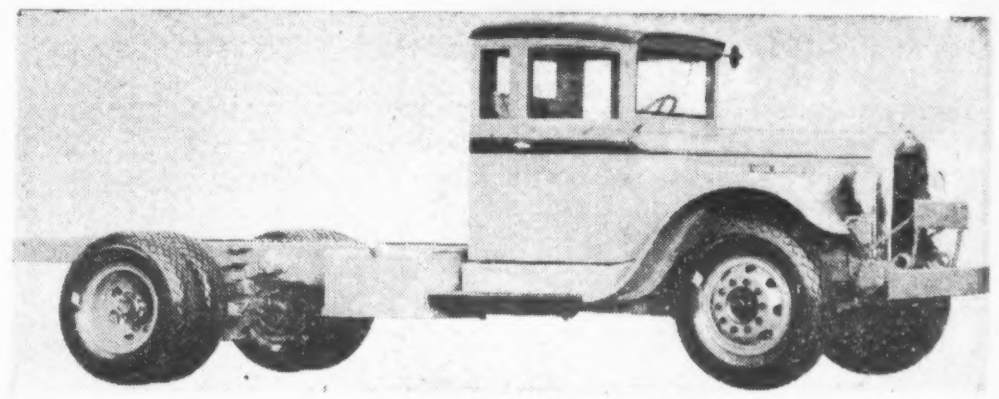
This truck has a full-floating rear axle and what is believed to be the largest spiral bevel drive gear ever supplied by any manufacturer in a production truck axle. It is 18 inches in pitch diameter. The rear axle housing introduces a new type of construction for a truck of this size. The axle center is of cast steel with 4½-inch diameter high carbon, heat-treated steel tubes which are ½ of an inch thick, pressed in and securely welded. These tubes, by means of widely spaced tapered roller bearings, carry the entire axle load.

The crank shaft weighs 104 pounds and is statically and dynamically balanced, has eight counterweights and an impulse neutralizer designed to contribute to smooth engine performance.

The chassis frame has a maximum depth of 10⅞ inches, and is ¼ inch thick. There are six cross members and two 14-inch truss side members, flanged at top and bottom, which add to the overall stiffness of the frame side rails. The semi-elliptic front springs are 42 inches long, 3 inches wide and 3¼ inches thick and have 10 leaves. Those in the rear are 56 inches long, 3½ inches wide and 7⅞ inches thick. There are 17 leaves in the rear springs, including the six in the auxiliary springs.

The Westinghouse air brake system is used. Cast cylinder iron brake drums are 17¼ inches in diameter. These cast drums diffuse heat quickly, wear evenly and will not lose their shape or become bell-mouthed. The air compressor has a cubic capacity of six feet, is pressure lubricated and water cooled.

An automatic central chassis lubrication system supplies oil to working parts in quantities regulated by the type of service in which the truck is used. The pump which operates through vibration when the truck is moving is designed to supply an almost constant flow of oil through small holes in various fittings in a system of oil plumbing.



New Dodge G-80 Heavy Duty 4-Ton Model

WILLYS REGAINING STOCK CONTROL OF WILLYS-OVERLAND

(Continued from Page 1)

shares. However, this group in July, 1929, sold about 700 000 shares of their common stock holdings to a syndicate which included Field, Glore & Co., George M. Jones of Toledo and C. O. Miniger, president of the Electric Auto-Lite Company.

The common stock at that time had a market value of about $25 a share. It closed yesterday on the New York Stock Exchange at 1⅝.

Mr. Willys and associates are still the dominant interests in the management, as they have been all along, even since the sale of a large part of their common stock interests to the Field, Glore-Jones-Miniger group. However, it is considered of special interest at this time that the stock voting powers are likely to be returned to the Willys interests.

The Willy-Overland report for the year ended December 31 last showed that extraordinary charges were deducted, bringing the total of such adjustments to more than $20,000,000. The 1931 adjustments included $6,125,488 written off against plant equipment and all special tools, $2,098,250 as write-offs in investments and advances to foreign and domestic affiliated companies and $2,683,724 as a provision for write-down of inventory, besides other extraordinary items.

The operating loss for the year, before these charges, was $1,892,260 after depreciation, interest and expenses. This compares with an operating loss of $4,434,319 in 1930, which included a credit of $902.567 for recovery of Federal taxes paid in previous years. The company showed a reduction last year to $5,675,574 in selling, general and miscellaneous expenses, from $9,428,728 in 1930 and $15,985,165 in 1929.

Sales to dealers last year totaled 61,782 units, compared with 81,000 in 1930. This decrease was smaller than the average for the industry as a whole.

FRANKLIN BODY SHOP COMPLETES FIRST UNIT

(Continued from Page 1)

tion to Franklin atuomobile manufacturing facilities.

The shop occupies 52,000 square feet of floor space and is employing 150 men, exclusive of those engaged in the painting and trimming operations. For a number of years the Franklin company has operated its own paint and upholstery departments. Equipment installed for body-building consists of woodworking and metal forming and finishing machinery.

The body just completed is a five-passenger sedan type for the new 12-cylinder Franklin model, on which first shipments are scheduled this month. Fabrication of other bodies of this type is under way on the assembly line, and shortly coupe and seven-passenger sedan bodies will be produced. The company will also manufacture its own limousine bodies for the 12-cylinder car. It is expected that between now and the end of March 150 bodies for this model will be completed, and in April this output is to be nearly doubled, according to the present production schedule. The styling of the new bodies has been done by one of the leading custom designers and is said to embody many new and distinctive features.

National announcement of the Franklin Twelve will be made early in April, it is expected, or just as soon as dealers throughout the country can be supplied with demonstrating models.

This truck of the Refiners Oil Corporation is Willard equipped

More Miles More Months with a WILLARD

Vital to the successful operation of any truck is a dependable flow of steady current from the storage battery. «·» In these days of strict economy when costly delays eat up profits, you cannot afford to have anything but the BEST of batteries in your truck, if you operate one or fifty.

Only Willard can give you the extra long life... the dependable performance of Thread-Rubber Insulated batteries. And only Willard can offer you the nation-wide service organization of 30,000 friendly Willard dealers that mean lower maintenance cost to you.

STORAGE BATTERIES

Willard

WILLARD STORAGE BATTERY CO. • *Cleveland* • *Los Angeles* • *Toronto, Ont.*

FLEET OWNER LISTS

OPERATORS HAVING	Number of Companies	No. of Listings	No. of men to see (Mailing pieces required)	No. of Automotive Vehicles	No. of Vehicles Per Contact
10 or more	16000	18000	25000	1500000	60
50 or more	2000	3050	5000	775000	155
100 or more	1150	2100	3400	700000	210
1000 or more	75	600	1000	300000	300

THESE LISTS ARE KEPT UP TO DATE

They show the Name of the Man to See and the total No. of Vehicles

Each Local list is zoned, routed, alphabetically indexed, and vocationally keyed

We can supply a local list for any Territory or a National List

FLEET OWNER LIST CO. 1817 B'WAY, N. Y. C.

Dodge Truck Has Profitable Outlet in the Bakery Field

New facts and figures covering the use of motor trucks in the baking industry, gathered in a survey conducted by Bakers' Helper, magazine of bakery practice and management, disclose that the use of gasoline motor trucks in this industry has increased steadily from a total of 48,385 units in 1926 to 80,240 on October 1, 1931. Meanwhile, the use of horse-drawn equipment has decreased from 22,920 units in 1926 to 17,480 in 1931. The number of electric trucks operated by bakers in 1926 was 4,828, as compared with 4,375 in 1931.

"In the 5,000 bakeries in forty states studied, more Dodge trucks than any other make are used," the report of the survey reads. "This supremacy was won by Dodge several years ago and has been maintained," it states. Bakers operate a total of 25,360 Dodge trucks, which is 11,238 more than the nearest competitive make and 16,344 more than the third most popular make of truck in the industry—or 2,322 more than the second and third ranking competitive makes combined. The Dodge total represents 31.6 per cent. of all trucks operated in the baking industry.

Annual truck purchases by bakers, the report further discloses, amount to 20,060 units. More one-ton trucks than any other capacity are used. The survey, however, revealed a tendency toward slightly heavier trucks. In the past two years the half-ton size has shown less growth than the ton and ton and one-half type. The number of each capacity is as follows: half-ton trucks, 15,870; one-ton trucks, 33,420; one and one-half ton, 27,340; two ton, 2,720 and three to five-ton, 980.

The value of trucks used in the baking industry is placed at $72,216,000 in the report. Annual new truck purchases exceed $18,054,000 in money value, it is claimed.

The results of the survey also show that in spite of present economic conditions the baking industry is within 10 per cent. of peak. Employment figures, United States government compiled, indicate bakery pay rolls at 91 per cent. of the 1928 high.

AUTOCAR ANNOUNCES PERSONNEL CHANGES

Ardmore, Pa., March 17.—H. M. Coale, vice-president in charge of sales of the Autocar Company, has announced the transfer of H. L. White from the managership of the Autocar branch in Pittsburgh to Philadelphia, where he will assume charge of the sales in the "outside" territory of the Autocar Philadelphia district, with headquarters at the Philadelphia branch, succeeding A. M. Bates, who is being transferred to the national accounts division in New York, where he will be a salesman under the supervision of C. E. Dwyer.

W. W. Smith is being transferred from the Autocar branch in Detroit, succeeding White at Pittsburgh, and D. M. Murray, who has previously been connected with the Autocar sales organization in Detroit, will succeed Smith at that point as branch manager. In addition, the announcement is also made of the appointment of J. O. Warner to the managership of the Autocar branch in St. Louis. Warner is a newcomer to the Autocar organization, but has previously had wide experience in the branch management and sale of trucks, especially in the St. Louis area, for both the Indiana and the Federal companies.

FEDERAL TRUCK NAMES SMITH IN ST. LOUIS

St. Louis, Mo., March 17.—J. McKee Smith has been appointed sales director in the local area of the Federal Truck Company, according to Phil H. Brockman, president of the company.

Smith has been associated with Federal Trucks for the past twenty years, and during the war was production engineer supervisor of the United States army motor transport division.

Delco-Remy Puts Out Heavy Duty Bus Coil

A new heavy duty coil, designed by Delco - Remy ignition engineers to meet the severe requirements of motor coach, truck and marine service, has been announced by the Delco-Remy Corporation, Anderson, Ind.

A new development in ignition coils, it is distinguished by its finwall case, the extra area of which is designed to insure adequate cooling. Additional features are its rugged design, its moisture-proof construction, a cap made of a new high-dielectric and arc-resisting material and the screw type high-tension terminal.

Every detail has been designed to provide a rugged, dependable ignition coil for this type of service with ample reserve capacity for heaviest operating conditions. Both 6 volt and 12-volt models are available.

United Motors service branches and authorized electrical service stations are distributors.

NEW ACCESSORY DEALER

Perth Amboy, N. J., March 17.—David Goldsmith and associates have organized the Washington Auto Supply Company, Inc., here to deal in automobile accessories.

NEWS!

TRUCK OPERATORS BENEFIT BY OIL COMPANIES' ADVANCE

Higher Standard Ethyl Gasoline Announced This Month Gives Better, More Economical Performance

PRACTICALLY overnight every truck operator who uses Ethyl Gasoline is finding himself with better equipment! Without so much as turning a set-screw he is now securing better performance from his trucks. Better performance because he is getting better gasoline. The anti-knock standard of Ethyl Gasoline has been raised!

Why the Change?

Ethyl was created to fill the need of the automotive industry for a fuel that would allow more efficient engines of higher compression ratio. In the years Ethyl has been on the market every manufacturer has increased the compression of his engines. Nearly every passenger car manufacturer and several leading manufacturers of heavy duty engines now offer high compression as either standard or optional equipment.

The oil companies selling Ethyl Gasoline have always met the demands of automotive engineers. They intend to keep abreast of future needs. The anti-knock standard of Ethyl Gasoline has been raised to make sure that—in the future as in the past—Ethyl will always bring out the *full* performance of any engine.

Ethyl Gasoline Double Tested

Truck operators who use Ethyl don't have to bother with testing apparatus. Before a refiner mixes Ethyl fluid with his gasoline he sends a sample of it to the Ethyl laboratories. Here it is tested to see if it is a good motor fuel from the standpoint of gum, sulphur, and distillation. If it passes these tests the amount of Ethyl fluid which must be added to bring it up to the Ethyl standard of anti-knock value is determined. The refiner adds this prescribed amount and submits a sample of the finished Ethyl Gasoline for final approval before it can be sold. This is done for each individual mix of gasoline!

Demonstrate Your Trucks With Ethyl

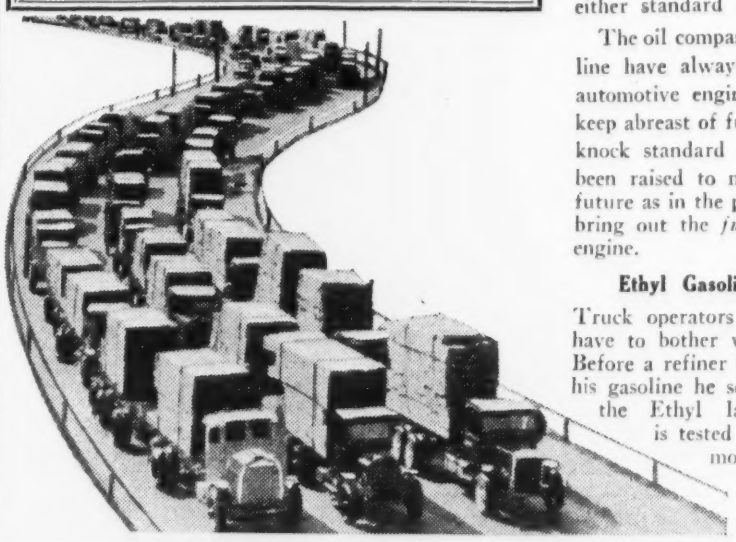
No matter how well your truck runs—it will run better on Ethyl Gasoline. It will climb hills faster, accelerate a heavy load easier . . . and under unusual conditions, such as pulling out of excavations, Ethyl's additional power will give outstanding performance.

When trucks are sold—recommend Ethyl. In reports submitted by companies using Ethyl Gasoline in their trucks the phrases "Longer time between carbon removals," "Less gear shifting," and "Saves on maintenance" occur again and again.

This year—when economies are of extra importance—Ethyl Gasoline offers your customer even greater value and higher quality. *Now* is the time for him to try Ethyl. You do him a favor to recommend it. Ethyl Gasoline Corporation, New York City.

LARGE FLEET OWNERS PROVE ETHYL SAVES MONEY

The accurate cost sheets kept by several large fleet owners have proved that Ethyl Gasoline saves money on maintenance. Carbon removals and overhauls can be spaced further apart. Replacement of parts, too, is reduced when Ethyl protects motors. Help your customer get the most satisfaction from the truck you sell—recommend Ethyl Gasoline.



ETHYL
ANTI-KNOCK COMPOUND
ETHYL GASOLINE CORPORATION
NEW YORK, U.S.A.
Controls Combustion

Ethyl fluid contains lead © E. G. C. 1932

ETHYL GASOLINE

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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ADVERTISING AND BUSINESS HEADQUARTERS

Harry A Tarantous, Business Manager, 350 Hudson St., New York, N. Y. George M. Slocum, Manager Detroit Bureau, 427 Fisher Building, Detroit, Mich., phone Trinity 2-3500; Willard R. Cotton, Western Manager, 333 North Michigan Ave., Chicago, Ill., phone Andover 2400; Metz B. Hayes, New England Manager, Little Building, Boston, Mass.; Blanchard, Nichols & Coleman, American National Bank Building, San Francisco, Cal.; Lincoln Building, Los Angeles, Cal.; 1037 Henry Building, Seattle Wash

Address ALL advertising and business correspondence to 350 Hudson St., New York city.

EDITORIAL DEPARTMENT

350 Hudson St., New York, N. Y. Telephone CA nal 6-1000

Alexander Johnston, Editor William C. Callahan, News Editor

Statistical Department (registrations and specifications), P. J. Robas, statistician. Engineering Department, A. Benson Carleton, technical editor. Merchandising Department, Charles S. Zack, editor. Art Department, John Bauerfeld, director.

Detroit Bureau, Chris Sinsabaugh, editor, 427-8 Fisher Building, Detroit, Mich. Telephone Trinity 2-3500. Contributing editor, John C. Wetmore.

Time Payment Licenses

SOME weeks ago Automotive Daily News carried a news story to the effect that the state of Arkansas had decided to permit its citizens to buy their license plates on the deferred payment plan. This plan is now in effect in the Southern state. Car owners are permitted to pay for license plates in four installments, exactly as they are allowed to pay their income taxes. Upon payment of the first installment the license plates are issued, and with them a sticker to be placed on the windshield to show that the first quarter's installment has been paid. If at the end of the quarter the car owner still desires to pay on the deferred payment plan, he is given a sticker of another color to show that he has paid for another three months' period.

Speaking of this interesting move by a state government, Roy Chapin, vice-president of the National Automobile Chamber of Commerce, recently remarked:

"It is difficult to conceive of a gesture giving greater emphasis to the importance of the motor vehicle than that a state should make so radical a change in its fiscal procedure. Yet in these times of stress, during which Arkansas has suffered the abnormal complications of drought and flood on top of depression, radical changes in procedure are unavoidable. Arkansas, in taking this action, recognizes not only that the automobile is indispensable to the citizen, but also that the plight of both the individual and the state is rendered more acute by driving it from the highway."

We would go even further than this. The whole life of this country, commercial and social, is based on the use of motor transportation. People have formed habits that are only possible by means of motor transport. Families are living in greater comfort than ever before in locations that would be impossible without motor vehicles to carry them to and from railways, places of business, shops, schools and what not.

This factor of motor transportation as a fundamental of our national life is one that cannot be overlooked in considering the future of the automotive industry. For the "long pull," to borrow a term from the stock market, the automotive industry is a good buy, because it produces something that is fundamental in the life of our country. This Arkansas gesture is a definite sign post pointing to this condition.

'Economy'

IN times such as we are goilng through, it is inevitable that economy should be the first thought not only of individuals, but of business organizations as well. It sounds fine to hear officials of a great industrial unit tell of the cutting of overhead, of the increased efficiency that has been produced in the plants, of wholesale economies that have been effected.

But when we come to analyze all these methods of saving money, it generally comes back to a saving at the expense of labor, a further addition to our already dangerous army of unemployment.

It is quite true that economy is wise and necessary in times like these, but with the steps that have been taken, with the loosening of credit that has been accomplished, business men will do well to look for economies that do not necessitate discharge of employees. Cutting down the pay roll for the mere sake of showing a temporary improvement in profit or a decrease in losses is a two-edged weapon.

Every energy in the country today ought to bear on the problem of making it possible to retain workers on the pay roll and calling more back to the colors as rapidly as conditions permit.

In This Corner....

Opinions, suggestions, complaints, criticisms, grievances or what have you. Open to every one to say anything, anyhow, any time. The communications printed in this department represent the ideas and opinions of our readers. They are not necessarily ours. If you have something to say on any phase of automotive activity, wholesale, retail or abusive, let us hear from you and we will tell the world.

Says New Car Dealers Should Sell Used Cars

Automotive Daily News: In a recent issue of your paper, I think last Saturday's, I saw a letter from one of your readers in which he urged the complete separation of the new and used car business through a manufacturer's mandate which would prohibit the new car dealer from taking any part in used car transactions. While this would, no doubt, serve the purpose of putting an end to wild trading, I very much question whether or not it is the wise thing to do or whether such drastic steps are necessary.

The one advantage the dealer enjoys at the present time in handling both new and used cars is the fact that when a salesman calls on a prospect for a new car and finds that he is unable to make the sale, it often happens that the salesman, before leaving, can sell his prospect a used car.

The second advantage is that once a dealer has sold a prospect a satisfactory used car he retains his customer as a prospect for a second used car the following year or, perhaps, the second year he will be able to sell him a new car. I am very much afraid that if the used car trade was taken away from the new car dealer altogether the owner of a car to turn in would go to the used car dealer and perhaps buy a better used car rather than a new car.

Of course, it must follow that some one must buy the new cars to provide the used car market with "better" used cars, but I do think that there would be much duplication of sales effort and much effort lost if the new car salesman called to sell a prospect a new car and then later a used car salesman would come around to sell a used car. Personally I think that if dealers were to refuse to accept used cars in trade, buyers would begin to feel that the dealer had no faith in his product and would hesitate to buy.

It is true that if dealers insist on making over allowances on used cars they would, perhaps, be better off if they had no used cars at all and sold new cars at a profit even though they sold fewer of them. I do think, however, that dealers will have to work out some way to protect themselves in this respect and when they do, used cars will no longer be a problem.

R. C., DES MOINES, IA.

AUBURN PLANNING DEMONSTRATION

(Continued from Page 1)

side the Auburn organization. Special exhibits, illustrating the advantages of Dual Ratio, also will be displayed in the Auburn salesroom here.

Mr. McDarby explained Dual Ratio, briefly, as an advancement in rear axle engineering, which eliminates the compromise from driving ratios. In the past, he said, it has been impossible for a single car to command maximum efficiency on hills and in traffic or on a straightaway, because its driving ratio was fixed. It was necessary to effect a compromise which would give fair performance under all conditions.

"Dual Ratio, by providing a choice of two driving ratios, has made this compromise unnecessary," he said. "A low ratio is afforded, especially for the requirements of hills and heavy traffic. It gives the car fullest pulling or acceleration power. The high ratio translates engine power into speed for the straightaway or allows the car to operate at ordinary speed, with a one-third reduction in engine revolutions and resulting fuel economy. The change from one ratio to the other is governed by a small control lever on the dash."

M'DARBY TALKS TO 200 DEALERS IN NEW YORK

New York, March 17. — N. E. McDarby, vice-president, in charge of sales of the Auburn Aptomobile Company, together with A. R. Gribben, sales manager of the New York Auburn branch, addressed over 200 Eastern dealers and their salesmen last night. McDarby told his audience that the dual ratio demonstration week (March 20-27) should produce a large volume of orders in view of the fact that about half a million people will get a ride in Auburns with dual ratio.

WILL OPERATE BUSES

Camden, N. J., March 17.—The Highway Motor Coach Company, with executive offices at 710 Federal St., has been formed to operate bus lines. Directors are William H. Lingo of Paulsboro, Robert S. Ambler and Joseph E. Cooney of Philadelphia.

COMING EVENTS

OCTOBER

3- 7—**Buffalo, N. Y.** National Metal Exposition, 174th Regiment Armory W. H. Eisenman, 7016 Euclid Ave., Cleveland, director.

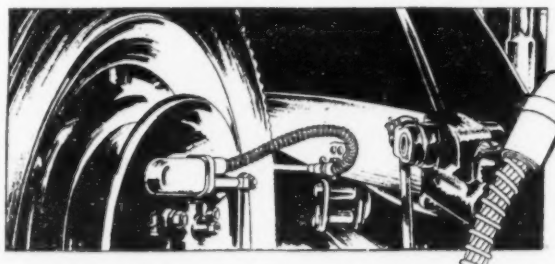
3- 7—**Buffalo, N. Y.** National Metal Congress. Sponsored by American Society for Steel Treating, with cooperation of American Society of Mechanical Engineers, Institute of Metals and Iron and Steel Divisions of American Institute of Mining and Metallurgical Engineers, American Welding Society, Wire Association.

FEBRUARY TRUCK SALES IN 16 STATES REVEAL 38% DROP FROM 1931

(Continued from Page 1)

the other states and the District this year, we shall have a total sale of Ford commercial units for the whole country of about 4,812. This compares with 10,868 sold last year. Given a Ford total for February, 1932, equal to that of the same month last year, we would have a grand total of 20,611, which would compare with the 23,475 commercial units sold in February, 1931, not at all a bad showing. This simply calls attention again to the important places in sales totals occupied by our big producers, such as Ford, Chevrolet and their fellows.

ONE MOVING PART



THE Tru-Lay Mechanical Brake Control greatly simplifies front end design and assembly. One end of the grease tight, water proof flexible steel tubing is anchored to the frame—the other end fits into the brake housing. The length is always the same—and the adjustment is constant—regardless of wheel position.

Over 4,000,000 Tru-Lay Brake Controls are now in service. There never has been a single replacement because of defects in material or workmanship.

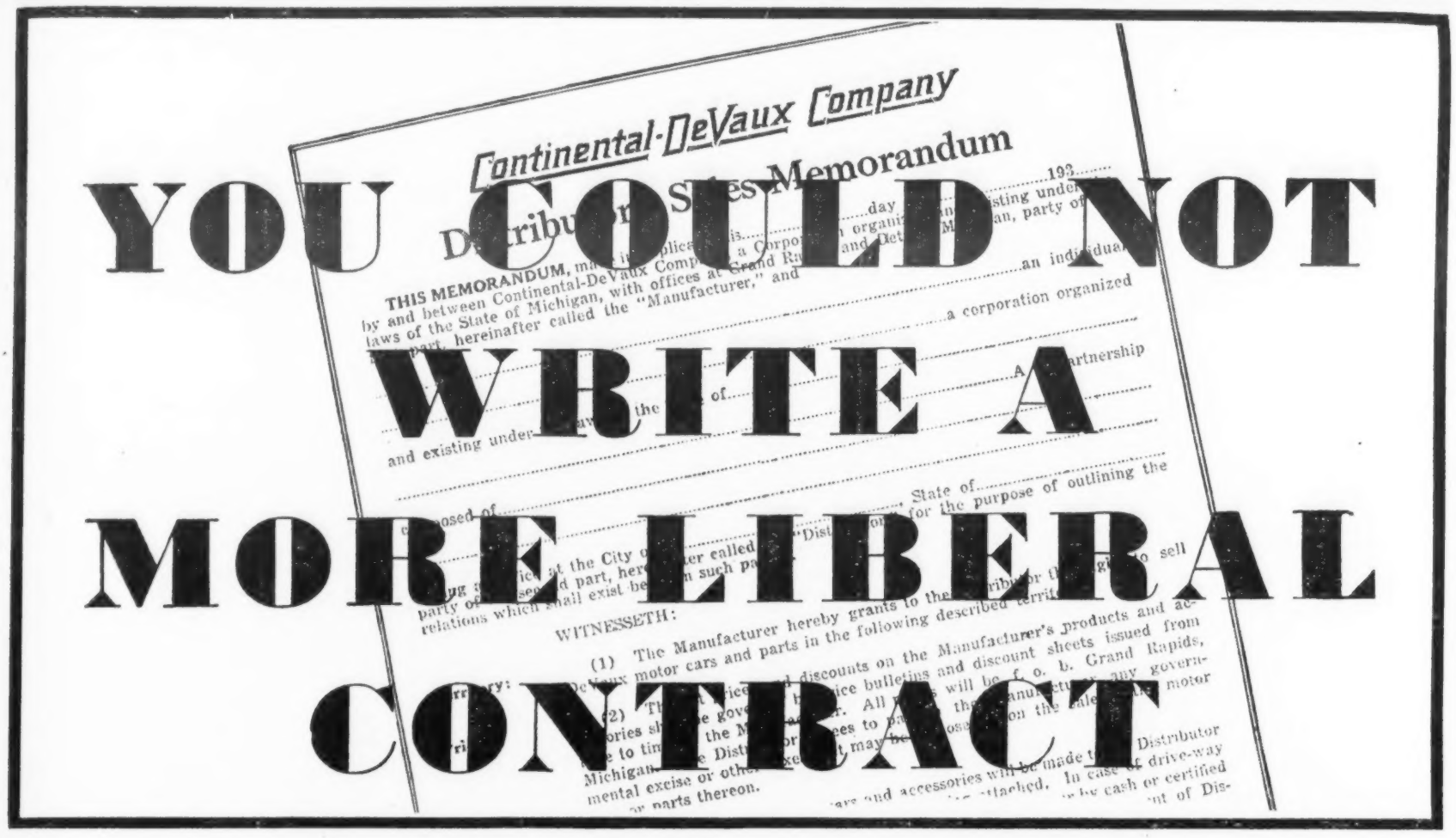
Our engineers are available any time. Let us furnish samples for test. Address:

AMERICAN CABLE COMPANY, Inc.
General Motors Building, Detroit, Michigan

EXECUTIVE OFFICES
New York Central Building
230 Park Avenue, New York, N. Y.

An Associate Company of the American Chain Company, Inc.

TRU-LAY MECHANICAL BRAKE CONTROL



YOU COULD NOT WRITE A MORE LIBERAL CONTRACT

★ ★ ★ ★ *liberal* discounts, *liberal* parts and service policy, *liberal* advertising in your territory mean one thing . . . GREATER NET PROFIT!

Whether you plan changing from one line to another or *adding* a companion car to the line you now sell, investigate the 1932 DeVaux Franchise . . . Continental-De Vaux Company has a clean-cut proposition with unusual money-making possibilities. In fact, designed in every particular FROM YOUR POINT OF VIEW. . . . And making this liberal contract a modern "gold-mine" for the live-wire dealer, is the New De Vaux 80, itself . . . It is packed with eye-appeal and value-appeal. Its performance is the envy of many costly cars. If ever a motor car had personality, here it is! . . . . . .

NEW DE VAUX 80

Prices start at **$795** *f. o. b. factory*

SEND THIS CONVENIENT COUPON—NO OBLIGATIONS

R. H. MULCH, General Sales Manager,
Continental-De Vaux Company,
Grand Rapids, Michigan.

Dear Sir: Send me complete details regarding the 1932 De Vaux Franchise.

Name.....

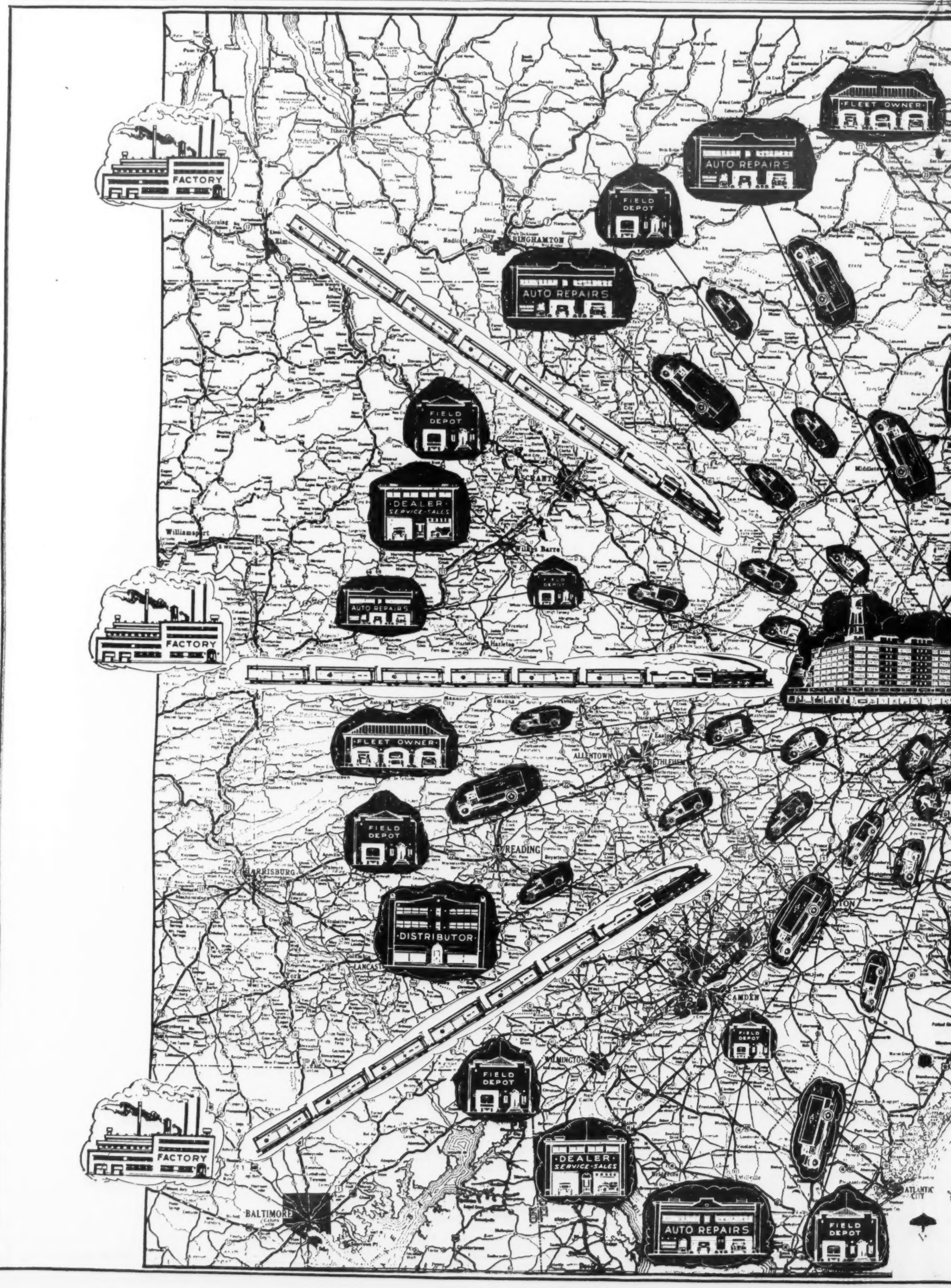
Address.....

ADN-3 *Now handling*.....

Continental-DeVaux Company—a subsidiary of Continental Motors Corporation, builders of the famous "Red Seal" Continental Motor.

Plants in DETROIT, GRAND RAPIDS, and MUSKEGON, MICH.

RESOURCES . . . $28,000,000.00


FACTORY
FIELD DEPOT
AUTO REPAIRS
FLEET OWNER
DEALER
SERVICE-SALES
DISTRIBUTOR
FACTORY
FIELD DEPOT
AUTO REPAIRS
FLEET OWNER
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SERVICE-SALES
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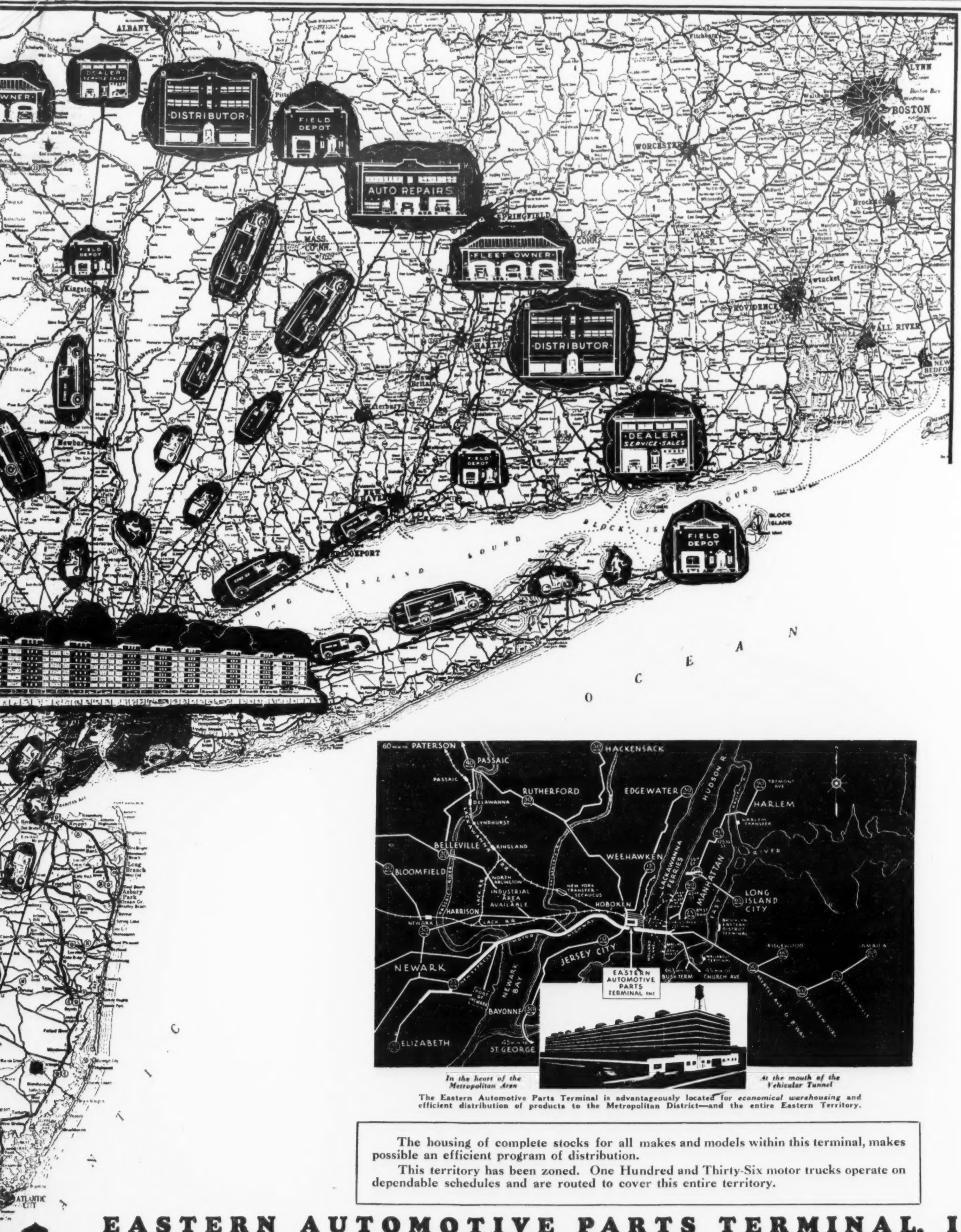
FIELD DEPOT
FACTORY
BINGHAMTON
Corning
Ithaca
Williamsport
Wilkes Barre
Hazleton
ALLENTOWN
READING
HARRISBURG
LANCASTER
WILMINGTON
CAMDEN
BALTIMORE
ATLANTIC CITY



The Eastern Automotive Parts Terminal is advantageously located for *economical warehousing* and efficient distribution of products to the Metropolitan District—and the entire Eastern Territory.

The housing of complete stocks for all makes and models within this terminal, makes possible an efficient program of distribution.

This territory has been zoned. One Hundred and Thirty-Six motor trucks operate on dependable schedules and are routed to cover this entire territory.

EASTERN AUTOMOTIVE PARTS TERMINAL, INC.

ON THE LACKAWANNA RAILROAD

629 GROVE STREET, JERSEY CITY, N. J. Phone, RE ctor 2-2345

Key City March Sales Off; Some Centers to February

(Continued from Page 1)

of March accounted for 383 passenger car sales, which compares with 1,080 units sold during the first ten days of March, 1931.

San Antonio, Tex., announces sale of 136 passenger cars, 12 trucks and 331 used vehicles during the first half of March. This compares with 141 passenger cars, 14 trucks and 364 used vehicles sold during the first half of February, 1932, and with 269 passenger cars, 25 trucks and 600 used units disposed of in the first half of March, 1931.

Cleveland has already reported with 615 new car sales and 2,774 used ones for the first half of March.

Our Louisville correspondent notes in his report that sales have picked up considerably in the last few days and that dealers in that city expect March as a whole to make a fair showing.

In reading all these figures it must be taken into consideration that Ford has been almost entirely out of the March sales market and will probably not become the important factor that he usually is until final April sales figures begin to be listed.

GRAMM

—offers you the possibility of securing truck, trailer, bus, fire chassis and special equipment designed and built by an organization of over thirty years continuous truck leadership.

DEALERS ARE INVITED

—to investigate the splendid sales possibilities of the GRAMM BALANCED LINE.

FLEET OWNERS WILL WELCOME

—the opportunity to purchase new equipment for cash on a new and unusual price basis.

A VERY LIBERAL PARTS DISCOUNT

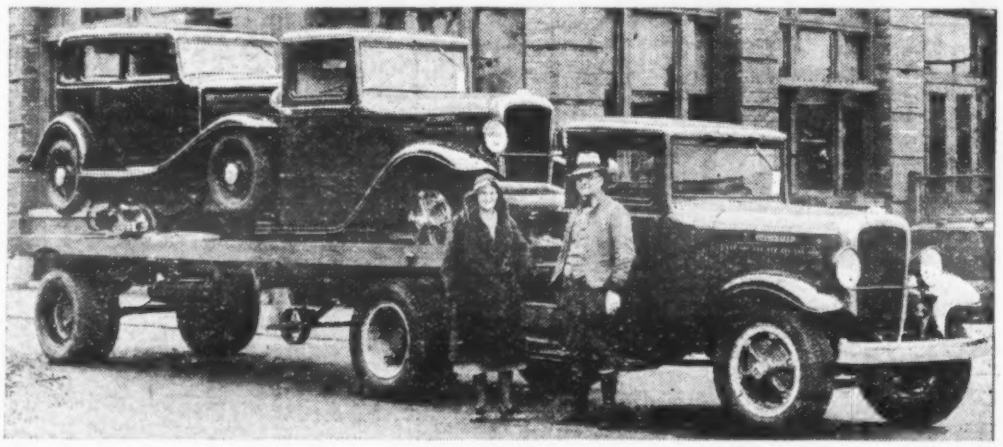
—is extended to all Fleet Buyers servicing their own equipment. It will convince you of our desire to lower your costs!

WE WANT FLEET BUYERS BUSINESS

Write for Our Special Proposition

GRAMM MOTORS, Inc., Delphos, Ohio.

1,080-Mile Journey With Studebaker Tractor



Mr. and Mrs. H. B. Swedlund of Sterling, Col., submit proof that two trucks and a passenger car can be driven away as easily as one. They were photographed in front of the Studebaker Administration Building just as they left on the 1,080-mile journey home.

A two-ton Studebaker tractor truck, equipped with a twenty-two-foot Edwards semi-trailer, furnished motive power. On this was mounted a 165-inch two-ton truck and a new Rockne "65" two door sedan.

Mr. Swedlund has the distinction of being the oldest automobile dealer in the state of Colorado, having held the Studebaker franchise for twenty-one years. Besides doing a thorough selling job on Studebaker products, Mr. Swedlund has found time to serve his city as mayor, spend a term in the state Legislature, and is now president of the Sterling Chamber of Commerse.

ALLIS-CHALMERS OFFERS HEAVY DUTY TRACTOR

Milwaukee, Wis., March 17.—The introduction of a six-cylinder heavy-duty tractor, a new elevating grader and a line of track-type wagons for dirt hauling gives the Allis-Chalmers Company the first complete dirt-moving outfit to be built and distributed by one manufacturer.

The four units of this complete set-up are manufactured at the Milwaukee, La Porte, Ind., and Springfield, Ill., plants. Included are two sizes of track-type tractors, one a heavy-duty model to haul the elevating grader and the other a lighter unit to pull a track-type dirt wagon. Both the grader and the wagon are of Allis-Chalmers make also, the grader being powered by an Allis-Chalmers motor.

The new tractor was recently put into production at the Springfield plant.

SZEKELY AIRCRAFT IS PUT TO RECEIVERSHIP

Grand Rapids, Mich., March 17.—The Szekely Aircraft & Engine Company of Holland, Mich., manufacturer of airplane motors, has been placed in receivership. A voluntary petition in bankruptcy was filed in the United States District Court March 9 by the company, alleging liabilities of $120,859.24 and assets of $136,784.60. The Grand Rapids Trust Company was appointed receiver.

LALLEY, PRES. AND TREAS. OF KELLY-SPRINGFIELD

New York, March 17.—W. H. Lalley has been elected president and treasurer of Kelly-Springfield Tire Co. Previously, Mr. Lalley held the office of president only.

Cumulative New Commercial Car Registration Statistics, January, 1932

Returns for today: Arkansas, Kansas, Maine, Massachusetts, New York and Vermont.

In this table, 44 states. Comparative figures for January, 1931, will be found on Page 12. Commercial Car figures do not include busses. Figures in this table are from R. L. Polk & Co. of Detroit, with the exception of Illinois, which are supplied by the Robinson Advertising Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. Metropolitan district figures compiled by Sherlock & Arnold, are included in New York state tot..l. Readers desiring county, city or town lists, or lists of owners in any given section, may obtain these by addressing any of these three companies. Some of this data has been published previously, but it is given here complete for the convenience of our subscribers.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	International	La France Republic	Mack	Pierce-Arrow	Reo	Sterling	Stewart	Studebaker	White	Willys-Overland	Miscellaneous	Totals	States
Alabama			79		5	1	54	9	16	3	1		5		1	3	1	1	1	180	Alabama
Arizona			17		3		22		2				1			1			1	47	Arizona
Arkansas			138		1		121	4	13				1			1	2		1	282	Arkansas
Colorado			163		19		198	20	35	1			9			10	4	7	7	473	Colorado
Connecticut	1	2	66	3	10	2	47	6	13				6			1	1	1	3	162	Connecticut
Delaware			11		1		10	1	5				1						1	30	Delaware
Florida		1	169		14	2	189	6	26				10			1	5		5	428	Florida
Idaho			23		1		17	2	5									1	1	50	Idaho
Illinois	2		330	46	54	13	237	33	112	15	1		27	12		6	7	21	25	941	Illinois
Indiana	2	19	191	5	25	3	166	16	53	2	1		16		6	8		9	3	525	Indiana
Iowa			109	12	10		69	9	47		1		8			6		2	8	281	Iowa
Kansas			76	2	7		83	7	9		1		3			1		1	1	191	Kansas
Kentucky		3	84	1	6	1	71	3	29		1		5			6	1	4	4	219	Kentucky
Maine			56	2	12		55	5	11				4			2			1	148	Maine
Maryland	5	4	69	1	10	1	63	10	21		6		8	1	1		1	1	2	204	Maryland
Massachusetts	5	3	96	1	24	2	153	19	17		6		15			2	9	2	2	356	Massachusetts
Michigan			176		26	18	179	13	27	1	5		20			4		3	4	476	Michigan
Minnesota			113	11	14	1	80	7	31		4		6			3	1	1	2	274	Minnesota
Mississippi			59		6		24	3	7							2		2		103	Mississippi
Missouri		1	108	10	7	3	76	8	42	1	2	1	2			2	3	3	5	274	Missouri
Montana			20		2		32	1	18				2			1			3	79	Montana
Nebraska			102	2	10		79	13	46		1		4			3		5	2	267	Nebraska
Nevada			7		1			1	1											10	Nevada
New Hampshire			33	2	5		28	3	7	1	1									80	New Hampshire
New Jersey	4	5	186	24	45	4	206	17	49	2	11		22	1	3	7	15		32	633	New Jersey
New Mexico			51	1	4		42		10				1				2			111	New Mexico
New York	4	25	436	27	116	1	436	62	133	1	27	1	48	11	19	6	24	7	91	1475	New York
North Carolina			158	1	14		118	14	15	1			1			1	2		4	329	North Carolina
North Dakota			14		4		11	1	21				2			2				55	North Dakota
Ohio	2	2	232	1	26	1	240	19	66	1	2	9	20		4	9	3	12	10	659	Ohio
Oklahoma			95		11		68	10	8				3			1	2	1	1	200	Oklahoma
Oregon			27		8	1	54	5	6					1				1		103	Oregon
Pennsylvania	8	8	315	4	61	2	348	37	98	4	18		30	4	13	8	14	22	62	1056	Pennsylvania
South Carolina			91		5	1	48	1	3							2			2	153	South Carolina
South Dakota			13		5		8	1	8		1		3			1		1	2	43	South Dakota
Tennessee			65		11	5	59	16	15		2					7			1	181	Tennessee
Texas			336	1	10	3	214	12	78				6			5	8	1	4	678	Texas
Utah			20		2		32	3	10		1		1			1		1		71	Utah
Vermont			22		1		24		4				1							52	Vermont
Virginia	2		169		15	1	142	15	26	2	3		7		1	3	5	1	6	398	Virginia
Washington			89	2	6	1	122	9	12				8			10	1	2	13	275	Washington
West Virginia		1	41	1	12	1	46	6	11	1			2			1		1	7	131	West Virginia
Wisconsin			146	5	18		94	11	42	1			6	3		7		6	23	362	Wisconsin
Wyoming			21		4		28	1	7							1	1	1	1	65	Wyoming
Totals	35	74	4822	165	651	68	4393	439	1215	37	96	11	314	33	48	135	112	121	341	13110	Totals

Sloan Reports on 1931 General Motors Operations

(Continued from Page 1)

operating and non-recurring profit of $9,482,861, after taxes, etc., so that total net earnings, operating and otherwise, for the year 1930 totaled $151,098,992.

"Dividends at the rate of $3 per share per annum on the common stock were paid during the year under review. Total dividends on all classes of stock declared during the year amounted to $139,875,900, as against $140,038,662 for 1930. In view of the fact that dividend disbursements exceeded net earnings for the period there resulted a reduction in the surplus account of $42,998,793. Surplus at the end of the period amounted to $301,266,482, as compared with $344,265,275 at the close of the year 1930.

"Not only from the standpoint of the automotive industry which constitutes the most important part of the corporation's sphere of activities, but of industrial activity in general, the year was one of declining trend. The close of the year showed no substantial evidence of any change in trend, although there was indicated a reduction in the rate of decline toward the end of the year. The degree of the decline and the extensive period over which it has continued, accompanied by the drastic deflation of all values, with the attendant difficulties, very naturally resulted in the upsetting of confidence.

"History demonstrations that such a psychological reaction is in no sense unusual under these circumstances; in fact, it quite generally accompanies, in more or less intensive form, this particular phase of the economic cycle. The problem that is presented to an institution like General Motors is to control its operations or to adjust it course of procedure so as to carry through the period, irrespective of how short or long it may be, in such a way as to protect most effectively the interests of stockholders, and at the same time to maintain maximum strength, both from the financial and operating standpoints, in order that it may be in a position to go forward aggressively when the period of readjustment has been completed and industry has passed through this particular phase of the economic cycle. The effectiveness with which management discharges this particular responsibility presents a definite measure of the ability and foresight of the operating personnel.

"Net sales, excluding inter-company and inter-divisional transactions, amounted to $808,840,723 in 1931, or a reduction of 17.7 per cent. from 1930. Comparable net operating earnings, excluding extraordinary and non-recurring adjustments in both years, showed a corresponding reduction of 18.6 per cent. In other words, the reduction in net operating earnings was maintained in line with the reduction in sales volume. The year 1931 showed a reduction in net sales in value of 46.2 per cent. from 1929. Net operating earnings, excluding extraordinary and non-recurring adjustments in 1931, showed a reduction of 53.6 per cent. from 1929.

"A statement in detail of unit sales for 1931 and earlier years is shown elsewhere in this report. It might be stated that sales of cars and trucks by dealers to consumers in the United States amounted to 937,537 units in 1931, as compared with 1,057,710 for the previous year, a reduction of 11.4 per cent. Sales of cars and trucks to dealers in the United States were 928,630 units, as against 1,035,660 for the previous year, a reduction of 10.3 per cent. Total sales of the corporation to its dealers, including Canadian sales and overseas shipments, totaled 1,074,709 units, as compared with 1,174,115 for 1930, a reduction of 8.5 per cent.

"Based upon automobile registrations in the United States, General Motors secured the highest percentage of the total passenger car business in its history, viz., 43.3 per cent. in 1931, as compared with 34.5 per cent. in 1930. Likewise, combining both passenger and commercial cars, General Motors obtained a percentage of 41.6 per cent., also the highest in its history, as compared with 33.7 per cent. in 1930. Total registrations of all new passenger cars in the United States showed a decrease of 27.3 per cent. in 1931 from 1930, while General Motors showed a decrease of 8.8 per cent.

"The corporation enters 1932 with a complete new line of products, representing a total of practically 150 different passenger models, at prices ranging from $475 to approximately $15,000, in every sense of the word a car for 'every purse and purpose'.

"The general character of these new offerings has not outstandingly changed. As a matter of fact, for some years it has been the policy of the corporation to effect progress in its products through evolution rather than by revolution. Its 1932 offerings reflect many engineering developments of the year, to which have been added greater comfort and luxury and increased performance. The economies that have been developed as a result of more intensive engineering and manufacture, assisted by the decline in commodity prices, have more than been reflected in increased dollar value. It is firmly believed that the competitive position of the corporation's current offerings justifies the belief that General Motors will more than hold its own with respect to the distribution of the available business during 1932.

"The fundamental strength of any endeavor, whatever its character or form, is measured by the efficiency and effectiveness with which it renders service to those whom it serves. In the case of an institution, such as General Motors, the technical position, attractiveness, quality and all around dollar value of its products are fundamental factors in determining its strength. In times of subnormal industrial activity, progress is always accelerated. It is not at all unreasonable to assume that during the next two or three years the motor car will make greater advancement on all counts than it has during a much greater interval in the past. All this is as it should be, because through the betterment of its products industry increases the desire to posseas and is thereby stimulated. The corporation recognizes the importance of these influences and is pushing forward aggressively, and as a matter of fact it has expanded the research activities upon which the future technical position of its products depends."

GOODRICH OFFICIAL URGES IMPROVEMENT FOR SALES METHODS

(Continued from Page 1)

themselves to present-day conditions continue to suffer severely.

"It is important that the merchandiser review his own business from two angles: One, as through a telescope, and the other as through a microscope," Kelly said. "Goodrich is accomplishing these methods by conferences consisting of broad discussions of merchandising problems and the preparation of merchandising plans in dramatized form.

"A staff of sales and advertising representatives traversed the country, accompanied by complete state equipment, presented a three-act play depicting the adversities met by the tire dealer, the reasons of failure to overcome obstacles, an improved plan of surmounting these short-comings and means of efficient and profitable merchandising."

Other speakers were Foster Slutz, of Detroit, district sales manager; Guy Gundaker, Akron, Goodrich sales promotion manager, and H. W. Selzell, Akron, Goodrich technical engineer.

WEISINGER NAMED FOR SCHROEDER & TREMAYNE

New York, March 17.—Since the merger of the Atlas Sponge Co. of this city and Schroeder & Tremayne, Inc., of St. Louis, Mo., last December, the former company has been operated as the eastern branch of the merger, with W. Garrett Weisinger, vice-president of Schroeder & Tremayne, as manager. The eastern branch is now functioning satisfactorily and Mr. Weisinger has resigned as manager and will hereafter handle the southern interests of his company, with headquarters in New Orleans. He will cover the entire southern territory from Washington, D. C., south.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

Predetermined Quality

After 4 years . .

Much has happened in four years, as those in charge of the maintenance of truck and bus fleets are well aware . . . Constantly increasing compression ratios, and improvements in motor fuels, carburetion and ignition have placed added emphasis on the necessity of quality spark plugs . . . After four years, Defiance finds itself—as a result of adherence to quality standards—more than ever favored with the good-will of superintendents of maintenance of many of the largest fleets.

DEFIANCE SPARK PLUGS, INC.,
326 - 20th Street ... Toledo, Ohio
District offices in all principal cities

More than 67,000 dealers from coast to coast are profiting by Defiance standards of Predetermined Quality backed by merchandising methods so different and so progressive as to have attracted their active interest and support.

Defiance
SPARK PLUGS

Recent Developments In Commodity Handling

By R. L. LOCKWOOD

Division of Simplified Practice, Department of Commerce

(Fourth installment of Mr. Lockwood's address at joint meeting of Metropolitan Section, A. S. M. E., and Electrical Association of New York, New York city.)

The average transportation company is not immediately and directly concerned with such costs, except as they affect the turn-around time of transportation vehicles. At least this has been the attitude of most transportation companies in the past. More and more of them, however, have wakened to the fact that the one factor of turn-around time alone is important enough to warrant careful attention to the cost of loading, unloading and handling the commodities they must transport. In a railway transfer house, for example, while the cost of transporting L. C. L. freight from car to car is absorbed in the freight rates, any reduction in this cost is a net gain. On a steamship pier a reduction in turn-around time of one day may mean several thousand dollars reduction in the operating cost of the steamship itself and may warrant the installation of expensive machinery to handle cargo on the pier, even though that expense would not be warranted if the actual cost of moving commodities were the only factor to be considered.

It has taken a long time to bring home such facts as these to the operators of transportation enterprises, and a still longer time to impress them upon the monds of most shippers. Even today their effect on final costs is scarcely understood at all by the ultimate consumers, who, in the long run, must pay every cent of the cost of production and distribution, including the tremendous waste. Concentrated effort on the part of manufacturers of materials handling equipment, ably supplemented by numerous trade publications, has spread knowledge of the real situation far and wide during the past few years. More and more transportation people, jobbers, warehousemen, and wholesale and retail dealers now recognize the fact that distribution cannot be handled economically unless it can be "integrated" to the highest possible degree.

One of the most serious difficulties in correcting the present chaotic condition lies in the fact that so few of our common everyday commodities are distributed under the control of any one company or group. Certain very large industries, notably the automobile industry, can control the physical distribution of their products all the way from factory to actual user, but most articles that we buy over the counter at a retail store, go through at least half a dozen hands before we get them. In few cases has any one element in the chain of distribution any control over the one which precedes or follows it. Goods are shipped from the factory to the jobber, by him to a wholesaler, thence to a retailer, who finally sells them to us. Many goods, however, go through three or four more sets of hands in the process. There are few nationally recognized standards of size, or weight, or shape, and consequently few kinds of goods which can be handled throughout the distribution process by the same kinds of mechanical equipment.

This situation, however hopeless it may appear at first glance, is rapidly improving. Even during the present period of depressed business, manufacturers, shippers, warehousemen, distributors of all sorts and transportation companies are devoting an increasing amount of study to problems of co-ordination, as well as to the detailed problems of handling specific kinds of goods. Equipment is constantly being developed and refined, and we have today certain definite trends which may be expected to become more and more effective as business returns toward normal. No radical changes seem likely at present in the design of railway cars, ships, barges or trucks. The new developments and changes will probably take the form of actual materials handling equipment or of accessory equipment for transportation vehicles.

(To Be Continued)

BROCKWAY MOTOR TRUCKS'

Record of Achievement is backed by fifty-seven years of manufacturing experience in the vehicle industry.

More than a score of these years of progress have been devoted exclusively to building Brockway trucks.

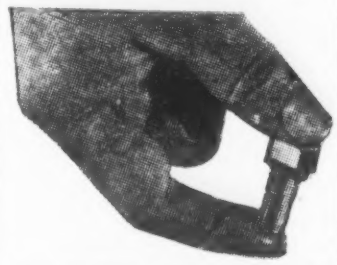
It will pay you to investigate such a record if you are interested in buying or selling motor trucks today.

Brockway Motor Truck Corporation

Cortland - - - New York

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

Cap Screw and Lockwasher Combined in Single Units



The Western Automatic Machine Screw Company, Elyria, O., has just placed on the market a new cap screw and lockwasher in one unit, two parts in one. This device is designed to eliminate the cap screw and lockwasher assembly, thereby obviating this cost from production. It is stated that no matter how many times the bolt or nut is removed the lockwasher will not come off, so that the effectiveness of the lockwasher never is lost.

I. H. C. ANNOUNCES TWO NEW LINES OF TRUCKS; CAPACITY FIVE TONS

St. Louis, March 17.—Announcement has been made in this city of two new lines of six-cylinder motor trucks with a rated capacity of five tons by M. F. McCarty, manager of the St. Louis factory branch of the International Harvester Company.

The trucks are powered by six-cylinder valve-in-head engines, with downdraft carburetion, oil-type air cleaner, fuel pump and thermostatically controlled cooling system.

Equipped with four-wheel brakes, the new trucks also have five speeds forward and two reverse-type transmission. The new models are available in 160-inch, 180-inch, 200-inch and 225-inch wheelbases to adapt them to a wide variety of purposes.

GRAHAM-PAIGE DECLARES REGULAR DIVIDEND

Detroit, March 17.—Graham-Paige Motors Corporation declared the regular quarterly dividend of $1.75 on first preferred, payable April 1 to stock of record March 15.

WISCONSIN AXLES

Wisconsin Axles alone may never close a sale. But they certainly make selling easier — with their reputation for dependable service.

WISCONSIN AXLE CO.

Oshkosh Wisconsin

Cumulative New Commercial Car Registration Statistics, January, 1931

This table is repeated for comparative purposes only. Figures for January, 1932, will be found on Page 10.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	International	La France-Republic	Mack	Pierce-Arrow	Reo	Sterling	Stewart	Studebaker	White	Willys-Overland	Miscellaneous	Totals	States
Alabama, '31			110		3		121	3	7		2						2	7		255	Alabama, '31
Arizona, '31			33		1		79		5				2		1	3			5	129	Arizona, '31
Ark., 1931			103		10		234		11								4	1		359	Arkansas, 1931
Colorado, 1931	1		184		26	1	236	16	29				10			11	7	11	9	541	Colorado, 1931
Connecticut, '31	3	2	58		20		77	2	5		1		12			8	2	1	3	194	Connecticut, '31
Delaware, '31		1	29		2		33	4									1			70	Delaware, '31
Florida, '31			307		20	1	504	1	51		6		10				21	7	4	932	Florida, '31
Idaho, '31	4		47		8		102	1	15				2					1	2	182	Idaho, '31
Illinois, '31	6	13	581	90	91	8	822	28	163	2	6		9	11	11		20	19	120	2005	Illinois, '31
Indiana, '31		14	259	4	22	4	359	18	55				6		6	11	1	6	11	776	Indiana, '31
Iowa, '31			221	1	37	1	200	5	50	2	3		5			11	1	1	8	546	Iowa, '31
Kansas, 1931		1	163	2	31		202	3	28				5			8	7	4	3	457	Kansas, 1931
Kentucky, 31	1		171		19		145	7	39				3			12	1	2	8	408	Kentucky, 1931
Maine, 1931			55	1	6	1	64		5		1		5							138	Maine, 1931
Maryland, '31	4	8	85	3	8		117	5	21		7		6	2		4	3	4	3	280	Maryland, '31
Mass., 1931	13	9	131	5	55	4	424	32	39	2	18		10	3	1	10	17		8	781	Mass., 1931
Michigan, '31			220	1	27	2	422	18	32		1		11			4		5	24	767	Michigan, '31
Minnesota, '31		1	164	6	24	4	209	7	35	2	3		11			14	4	9	7	500	Minnesota, '31
Mississippi, '31			37		1		70	2	1		1						4			116	Mississippi, '31
Missouri, '31	1	1	121	3	8	1	136	10	14		8			1			3	2	4	313	Missouri, '31
Montana, '31			56		4		91	4	19		1		3					1	3	182	Montana, '31
Nebraska, '31		1	257	1	12	1	260	11	59		4		7			15	2	7	6	643	Nebraska, '31
Nevada, '31			17		6		23		1				2			1	1		1	52	Nevada, '31
New Hamp., '31			10		2	2	17				1									32	New Hamp., '31
New Jersey, '31	19	19	324	3	95	10	701	43	58	2	42		17	7	7	13	24	4	57	1435	New Jersey, '31
New Mexico, '31			96	1	5		87	1	8				2			1			2	203	New Mexico, '31
New York, '31	129	31	512	22	123	7	619	50	85		45	1	21	11	35	18	23	4	46	1782	New York, 1931
N. Carolina, '31	1		224		25	1	185	1	13		1		2			1	2	3	4	463	N. Carolina, '31
N. Dakota, '31			32		6		40	2	17									1		98	N. Dakota, '31
Ohio, '31	6	7	304	2	46	2	458	23	43	3	1		11	1	4	18	14	15	22	980	Ohio, '31
Oklahoma, 1931		1	157		42	8	181	8	27				4			4	1	1	4	438	Oklahoma, 1931
Oregon, '31			81		5	1	169	8	8	1	4		4	1		7	3		9	301	Oregon, '31
Pennsylvania, '31	22	14	340	4	103	13	599	22	75	4	24		16	10	10	17	13	9	34	1329	Pennsylvania, '31
S. Carolina, '31		9	152		4	1	129	2	3		7		1			2	1		4	315	S. Carolina, '31
S. Dakota, '31		1	68	7	10		66	2	27				2			5		2	3	193	S. Dakota, '31
Tennessee, 1931			95		19	9	134	5	12		4		1			8	1	2		290	Tennessee, 1931
Texas, '31		6	434	3	42	8	517	21	98		1		14			7	3	5	24	1183	Texas, '31
Utah, '31			28				34	5	4							4		1	7	83	Utah, '31
Vermont, 1931			20		3		26		9							1		1		60	Vermont, 1931
Virginia, '31	2	1	160		14	4	133	12	7	1	6				2	1	5		4	352	Virginia, '31
Washington, '31			114		15	2	308	14	27		5		5	1		9	5	4	38	547	Washington, '31
W. Virginia, '31			92	1	18		102	5	14		7					3	2	4	3	251	W. Virginia, '31
Wisconsin, '31		2	242	4	21	3	292	8	29				7	3	2	13	1	1	26	654	Wisconsin, '31
Wyoming, 31			17		5		44		2				1			2	3		2	75	Wyoming, 1931
Totals	212	147	6911	164	1034	99	9771	409	1250	19	210	1	226	51	79	246	198	145	518	21690	Totals

Combined report: Willys, Whippet and Willys-Knight.

Major Specifications and Mechanical Details of 1932 Commercial Cars

LEADING MAKES NATIONALLY DISTRIBUTED

Make and Model	Capacity—Tons or Lbs.	Chassis Price	Engine	Valve Arr'g'm't	No. of Cyls.	Bore and Stroke	Piston Disp.	Tax H. P.	Max. Brake H. P. and Peak R. P. M.	Type Camshaft Drive	Radiator Make	Clutch Make	Universals Make	Steering Gear Make	Carburetor Make	Fuel Feed Type	Make Electr'l System	Transmission	No. Spds. For.	Rear Axle Type	Final Drive	Final Gear Reduction	Type Service Brakes	Area Service Brakes	Standard Wheel Base	Chassis Wgt.	Standard Tire Sizes Front	Rear
Am. La France Big Chief	6	6725	Own	L	6	4½x6	411.0	40.8	85@1800	—	—	Own	—	Ross	Zen	Vac	DR	Own	4	Own	2 R	32 8	W41A	—	226	10600	40x8S	40x8DS
Austin	400	475	Own	L	4	2.2x3	45.6	7.8	13@3000	G	Hex	Rock	Spic	Own	Ti	Gra	Aut	W-G	3	Sal	Sp	5.38	O4M	76.5	75	1210	3.75x18	3.75x18
Autocar A	12000	3200	Own	L	6	4 x4¾	358.0	38.4	82@2400	G	Per	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	Sp	27 9	LO4IDV	460	150	5300	20x8.25	20x8.25
Autocar D	16000	3500	Own	L	6	4 x4¾	358.0	38.4	82@2400	G	Per	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	2 R	33 5	LO4IDV	460	150	5600	20x8.25	20x8.25D
†Autocar SH	19000	4300	Own	L	6	4½x4½	404.0	43.4	92@2400	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2 R	44 0	O2IM	328	114	6770	34x7	34x7D
†Autocar H	19000	4100	Own	L	4	4½x5½	350.0	32.4	45@1450	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2 R	48 6	O2IM	328	114	6770	34x7	34x7D
†Autocar H8	24000	4600	Own	L	4	4½x5½	350.0	32.4	45@1450	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2 R	54 3	O2IM	516	114	7600	40x8	40x8D
†Autocar SH8	24000	4800	Own	L	6	4½x4½	404.0	43.4	92@2400	G	Own	Long	Spic	Ross	Str	Gra	DR	Own	4	Own	2 R	54 3	O2IM	516	114	9100	40x8	40x8D
Autocar SCH8	24000	5100	Own	L	6	4½x4½	404.0	43.4	92@2400	G	Own	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	2 R	54 3	O4IMV	516	157	8180	20x9.75	20x9.75D
Autocar N	22000	4600	Own	L	6	4½x4¾	404.0	43.4	92@2400	G	Own	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	2 R	41 2	OL4IHV	574	174	7990	20x9.75	20x9.75D
Autocar TFA	28000	6100	Own	L	6	4½x4¾	453.0	48.6	101@2100	G	Own	Long	Spic	Ross	Str	Vac	DR	Own	12	Own	2 R	101 3	LO4IDV	602	192	9300	20x10.50	20x10.50D
Autocar C	28000	5900	Own	L	6	4½x4¾	453.0	48.6	101@2400	G	Own	Long	Spic	Ross	Str	Vac	DR	Own	4	Own	2 R	51 7	O4IMV	516	172	9500	24x10.50	24x10.50D
Autocar FE	30000	11000	Ster	L	6	5¼x6	780	66.2	156@1800	G	G & O	Br-L	Spic	Ross	Zen	P	NE	Br-L	12	Wis	2 R	89.2	W4IA	674	180	12300	24x10.50	24x10.50D
Autocar GE	45000	12500	Ster	L	6	5¼x6	780	66.2	156@1800	G	G & O	Br-L	Spic	Ross	Zen	P	NE	Br-L	12	Tim	Wo	82.2	W6IA	720	198	16300	20x9.75	20x9.75D
Brockway 80	9500	1215	Con	L	6	3⅞x4	214.7	27.3	61@3000	C	G &O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Tim	Sp	36.2	CB4IM	248	149	4075	30x6.00	30x6.00D
Brockway 90	11500	1525	Con	L	6	3⅞x4⅝	248.2	27.3	65@2700	C	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Tim	Sp	37.4	CB4IM	280	149	4355	30x6.50	30x6.50D
Brockway 92	12500	1800	Con	L	6	3⅞x4⅝	248.2	27.3	65@2700	C	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Tim	Sp	37.4	CB4IM	280	149	4400	30x6.50	30x6.50D
Brockway 120	15000	1990	Con	H	6	4 x4⅛	311.0	38.4	73@2400	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Tim	Sp	38.5	L4IH	353	156	5500	32x6	32x8D
Brockway 140	17500	2495	Con	H	6	4 x4⅛	311.0	38.4	73@2400	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2 R	43.5	L4IHV	386	156	6100	32x6	32x6D
Brockway 141	19500	2935	Con	H	6	4 x4⅛	311.0	38.4	73@2400	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2 R	46.2	L4IHV	380	170	6500	32x6	32x6D
Brockway 150	19500	3160	Con	H	6	4½x4¾	380.9	40.8	89@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2 R	46.6	L4IHV	380	170	7100	32x6	32x6D
Brockway 175	19500	3660	Con	H	6	4⅝x4¾	427.5	45.9	100@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Ful	5	Wis	2 R	46.6	L4IHV	380	170	7200	34x7	34x7D
Brockway 195	22000	3820	Con	H	6	4½x4¾	380.9	40.8	89@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2 R	52.4	L4IHV	471	170	8100	34x7	34x7D
Brockway 220	25000	4560	Con	H	6	4⅝x4¾	427.5	45.9	100@2200	C	G & O	Br-L	Spic	Ross	Zen	P	*Aut	Br-L	4	Wis	2 R	50.7	L4IHV	548	170	8675	36x8	36x8D
Brockway 260	28000	5850	Con	H	6	4⅝x5¼	501.0	48.6	120@2200	C	G & O	Ful	Spic	Ross	Zen	P	*Aut	Ful	4	Wis	2 R	50.7	L4IHV	546	212	9000	22x10.50	22x10.50D
Chevrolet	½	358	Own	H	6	3⅛x3¾	194.0	26.3	50@2600	G	na.	Own	Own	Own	Car	P	DR	Own	3	Own	Sp	13 6	O4IM	101	109	*1880	19x4.75	19x4.75
Chevrolet	1½	575	Own	H	6	3⅛x4¾	194.0	26.3	50@2600	G	Har	Own	Own	Own	Car	P	DR	Own	4	Own	Sp	33 4	O4IM	170	157	3015	30x5	30x5D
Chevrolet	1½	520	Own	H	6	3⅛x3¾	194.0	26.3	50@2600	G	Har	Own	Own	Own	Car	P	DR	Own	4	Own	Sp	33 4	—	—	131	2700	30x5	32x6
Diamond T 216 B	1½	795	Her	L	6	3⅝x4½	228.0	27.3	56@2400	G	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Cla	Sp	—	L4IH	252	135½	3260	20x6.50B	20x6.50B
Diamond T 316	2	1195	Her	L	6	3⅝x4½	263.0	29.4	65@2400	G	G & O	Borg	Spic	Ross	Zen	P	Aut	W-G	4	Cla	Sp	—	L4IH	350	155	4400	20x6.50B	20x6.50DB
Diamond T 303 F	2-2½	1795	Her	L	6	3¾x4½	298.0	33.7	67@2400	G	G & O	Borg	Spic	Ross	Zen	P	Aut	Cov	4	Cla	Sp	—	L4IHV	350	159¾	5100	20x7.00B	20x7.00DB
Diamond T 351 B	2½-3	2395	Her	L	6	4 x4½	339.0	38.4	74@2400	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	4	Tim	Sp	—	L4IHV	408	168	6000	20x7.50B	20x7.50DB
Diamond T 303 F B	2-2½	2425	Her	L	6	4 x4½	339.0	38.4	74@2400	G	G & O	Cov	Spic	Ross	Zen	P	L-N	Cov	4	Cla	Sp	—	L4IHV	408	199	6100	20x7.50	20x7.50DB
Diamond T 504 A	3	2650	Her	L	6	4 x4½	339.0	38.4	74@2400	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	4	Wis	2 R	—	L4IHV	408	176½	6400	20x8.25B	20x8.25DB
Diamond T 506 A	3	2950	Her	L	6	4½x4½	383.0	43.3	85@2200	G	G & O	Cov	Spic	Ross	Zen	P	L-N	Cov	5	Wis	2 R	—	L4IHV	408	184	6400	20x8.25B	20x8.25DB
Diamond T 603	3-4	3395	Her	L	6	4⅝x4¾	428.4	45.9	94@2200	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	5	Wis	2 R	—	L4IHV	499	169	7500	20x9.00B	20x9.00DB
Diamond T 606 B	3-4	3695	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	G & O	Cov	Spic	Ross	Zen	P	L-N	Cov	5	Wis	2 R	—	L4IHV	499	187½	7500	20x9.00B	20x9.00DB
Diamond T 750	4-5	4925	Her	L	6	4⅝x5¼	529.0	51.4	114@2200	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Cov	5	Wis	2 R	—	W4IA	552	178	9300	22x9.75B	22x9.75DB
*Diamond T 801	4	4140	Her	L	6	4⅝x4¾	428.4	45.9	94@2200	G	G & O	Cov	Spic	Ross	Zen	P	Aut	Br-L	7	Own	Wo	—	L6IHV	571	189½	8300	36x8P	36x8P
*Diamond T 1201	6	5600	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	G & O	Cov	Spic Blo	Ross	Zen	P	Aut	Br-L	7	Tim	Wo	—	W41A	238	190	11000	34x7P	34x7DP
*Diamond T 1602	8	6400	Her	L	6	4⅝x5¼	529.0	51.3	114@2400	G	G & O	Cov	Spic Blo	Ross	Zen	P	Aut	Br-L	7	Tim	Wo	—	W41A	238	190	11700	36x8P	36x8DP
*Diamond T 1603	8	7500	Wak	L	6	5 x5¾	677.4	60.0	127@2000	G	G & O	Br-L	Spic-Blo	Ross	Zen	P	Aut	Br-L	7	Tim	Wo	—	W41A	238	194	12500	36x8P	36x6D
Dodge Bros. UF 10	½	375	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Un	Own	Car	P	DR	Own	3	Own	Sp	12.8	O4IH	121	109	1925	19x5.00	19x5.00
Dodge Bros. F 10	½	445	Own	L	6	3¼x4¼	211.5	25.3	66@3200	C	Fed	Borg	Un	Own	Car	P	DR	Own	3	Own	Sp	12.8	O4IH	121	109	1975	19x5.25	19x5.25
Dodge Bros. U 1	¾	490	Own	L	4	3⅝x4¾	196.0	21.0	45@2800	G	Fed	Borg	Spic	Han	Car	P	DR	Own	3	Own	Sp	19.2	O4IH	189	124	2260	20x6.00	20x6.00
Dodge Bros. DA 1	¾	595	Own	L	6	3⅝x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Spic	Han	Car	P	DR	Own	3	Own	Sp	19.2	O4IH	189	124	2360	20x6.00	20x6.00
Dodge Bros. U 1	1	495	Own	L	4	3⅝x4¾	196.0	21.0	45@2800	G	Fed	Borg	Spic	Han	Car	P	DR	Own	4	Own	Sp	36 1	O4IH	206	133	2590	20x6.00	32x6
Dodge Bros. DA 1	1	595	Own	L	6	3⅝x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Spic	Han	Car	P	DR	Own	4	Own	Sp	33 4	O4IH	206	133	2690	20x6.00	32x6
Dodge Bros. UG 30	1½	525	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	36.9	O4IH	176	131	2490	6.00x20	32x6
Dodge Bros. UG31	1½	550	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	36.1	O4IH	176	131	2640	20x6.00	36x6.00
Dodge Bros. UF 30	1½	595	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	W-G	Car	P	DR	Own	4	Own	Sp	37 1	O4IH	187	136	2581	20x6.00	32x6
Dodge Bros. UF 31	1½	670	Own	L	4	3⅝x4¾	196.0	21.0	48@2800	G	Fed	Borg	Cle	W-G	Car	P	DR	Own	4	Own	Sp	37.1	O4IH	229	165	2757	20x6.00	32x6
Dodge Bros. F 30	1½	695	Own	L	6	3¼x4¼	211.5	25.3	66@3200	C	Fed	Borg	Cle	W-G	Car	P	DR	Own	4	Own	Sp	37 1	O4IH	187	136	2631	20x6.00	32x6
Dodge Bros. F 31	1½	770	Own	L	6	3¼x4¼	211.5	25.3	66@3200	C	Fed	Borg	Cle	W-G	Car	P	DR	Own	4	Own	Sp	37 1	O4IH	229	165	2807	20x6.00	32x6
Dodge Bros. F 35	1½	1425	Own	L	6	3⅜x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Cle	Han	Zen	P	DR	Own	4	Own	Sp	41 4	O4IH	305	140	3780	20x6.00	20x6.00D
Dodge Bros. F 36	1½	1485	Own	L	6	3⅜x3⅞	208.0	27.3	63@3200	C	Fed	Borg	Cle	Han	Zen	P	DR	Own	4	Own	Sp	41 4	O4IH	305	165	3972	20x6.00	20x6.00D
*Dodge Bros. F 40	2	1995	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	43 7	O4IH	350	150	5273	20x6.50	20x6.50D
*Dodge Bros. F 41	2	2085	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	43 7	O4IH	350	165	5211	20x6.50	20x6.50D
Dodge Bros. F 42	2	2180	Own	L	6	3¼x4⅝	217.7	25.3	75@3200	C	Fed	Borg	Cle	Own	Car	P	DR	Own	5	Own	Sp	50.0	O4IH	229	136	5311	20x7.00	20x7.00D
Dodge Bros.	3	1515	Own	L	6	3⅜x4½	241.0	27.3	78@3000	C	Long	Borg	Un	Han	Zen	Vac	NE	Own	4	Own	Sp	46.3	O4IH	382	135	4235	32x6	32x6D
Dodge Bros	3	1565	Own	L	6	3⅜x4½	241.0	27.3	78@3000	C	Long	Borg	Un	Han	Zen	Vac	NE	Own	4	Own	Sp	46.3	O4IH	382	165	4520	32x6	32x6D
Dodge Bros	3	1615	Own	L	6	3⅜x4½	241.0	27.3	78@3000	C	Fed	Borg	Un	Han	Zen	Vac	NE	Own	4	Own	Sp	46.3	O4IH	382	185	4715	32x6	32x6D
Dodge Bros. F 60	3	2645	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	2 R	56.6	O4IH	416	146	5543	32x6	32x6D
*Dodge Bros. F 61	3	2575	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	48 8	O4IH	416	170	5789	32x6	32x6D
*Dodge Bros. F 62	3	2695	Own	L	6	3⅝x5	309.6	31.5	96@3000	G	Long	Borg	Cle	Sag	DL	P	DR	Own	4	Own	Sp	48 8	O4IH	416	195	5901	32x6	32x6D
Dodge Bros. G 80	4	5250	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	62.7	B4IA	650	146	7640	20x9.75	20x9.75D
Dodge Bros. G 81	4	5285	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	69.6	B4IA	650	170	7840	20x9.75	20x9.75D
Dodge Bros. G 82	4	5350	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	69.6	B4IA	650	195	8040	20x9.75	20x9.75D
Dodge Bros. G 83	4	5415	Own	L	8	3½x5	384.8	39.2	120@3000	G	Long	Borg	Cle	Sag	Str	P	DR	Own	5	Own	Sp	69.6	B4IA	650	220	8400	20x9.75	20x9.75D
Essex Com.	¾	445	Own	L	6	2¾x4½	163.0	18.2	55@3300	C	Har	Own	Spic	Gem	Mar	Vac	Aut	Own	3	Own	Sp	5 40	4M	—	110½	1970	20x5	20x5.50
Federal D 3	*1½	670	Con	L	4	3⅞x4¼	200.5	24.0	50@2700	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L4IH	377	130	3225	20x6.00	32x6
Federal E 3	*1½	695	Con	L	6	3⅜x4	215.0	27.3	72@3400	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L4IH	377	130	3225	20x6.00	32x6
Federal F 7	*1¾	1325	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Gem	Zen	P	DR	Own	4	Tim	Sp	29.2	L4IH	413	132	3765	30x5	30x5D
Federal F 8	*1¾-2	1425	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Gem	Zen	P	DR	Own	4	Tim	Sp	34.0	L4IH	438	132	3865	30x5	30x5D
Federal A 6	*2	1695	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Cla	Sp	38.5	L4IH	450	151	4550	32x6	32x6D
Federal A 6 T	*2½	1995	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Sp	47.1	L4IHV	659	151	5110	32x6	32x6D
Federal A 6 T W	*2½	2130	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Sp	52.9	L4IHV	659	151	5110	32x6	32x6D
Federal T 3 W	*2½	1595	Wau	L	4	4 x5	251.0	25.6	50@2000	G	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Wo	36.3	L4IH	575	148	5110	32x6	36x8
Federal T 8 W F	*2½	1795	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Tim	Wo	38.8	L4IHV	659	148	5400	32x6	32x6D
*Federal D 2 8 W	*2½-3	1050	Con	L	4	3⅞x4¼	200.5	24.0	50@2700	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L6IH	566	140	3925	20x6.00	32x6
*Federal E 2 8 W	*2½-3	1150	Con	L	6	3⅜x4	215.0	27.3	60@2600	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L6IH	566	145	3975	20x6.00	32x6
*Federal D 2 D	*2½-3	1350	Con	L	4	3⅞x4¼	200.5	24.0	50@2700	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L6IH	566	140	4235	20x6.00	32x6
*Federal E 2 D	*2½-3	1450	Con	L	6	3⅜x4	215.0	27.3	60@2600	C	Long	Borg	Cle	Gem	Zen	P	DR	W-G	4	Cla	Sp	40.8	L6IH	566	145	4310	20x6.00	32x6
Federal T 10 B	*2½-3	2550	Con	H	6	4 x4⅛	311.0	38.4	75@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Own	4	Tim	Sp	44.5	L4IHV	659	165	6550	34x7	34x7D
Federal T 10 W	*2½-3	2685	Con	H	6	4 x4⅛	311.0	38.4	75@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Own	4	Tim	Sp	44.0	L4IHV	659	165	6550	34x7	34x7D
Federal T 10 D R	*2½-3	2685	Con	H	6	4 x4⅛	311.0	38.4	75@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Own	4	Tim	2R	45.6	L4IHV	659	165	6550	34x7	34x7D
Federal U 6	*3-4	3865	Con	H	6	4½x4¾	381.0	40.8	85@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	Wo	64.6	L4IHV	767	165	7420	36x8	36x8D
Federal U 6 D R	*3½-4	3860	Con	H	6	4½x4¾	381.0	40.8	85@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	2R	69.6	L4IHV	767	165	7420	36x8	36x8D
*Federal A 6 S W	*4	2195	Con	L	6	3⅜x4⅝	248.0	27.3	64@2600	C	Long	Borg	Pet	Ross	Zen	Vac	DR	Own	4	Cla	Sp	38.5	L6IHV	675	164	5620	32x6	32x6D
Federal C 7	*5-6	4485	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	2R	75 2	L4IHV	866	195	9550	20x9.75	20x9.75D
Federal C 7 W	*5-6	4485	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	W	78.0	L4IHV	866	195	9550	20x9.75	20x9.75D
Federal C 8	*5-6	4895	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	2R	75.2	L4IA	921	195	9650	20x9.75	20x9.75D
Federal C 8 W	*5-6	4895	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Han	Zen	P	DR	Br-L	7	Tim	Wo	78.0	L4IA	921	195	9650	20x9.75	20x9.75D
Federal X 8	*7½	4335	Con	L	4	5 x6	471.0	40.0	61@1350	G	Long	Borg	Pet	Gem	Zen	Vac	AB	Br-L	7	Tim	Wo	111.6	T21MV	603	162	9750	36x6S	40x14S
Federal X 8 D R	*7½	4335	Con	L	4	5 x6	471.0	40.0	61@1350	G	Long	Borg	Pet	Gem	Zen	Vac	AB	Br-L	7	Tim	2R	106.0	T21MV	603	162	9750	36x6S	40x14S
Federal X 8 R	*7½	4735	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	Wo	111.0	T21MV	462	162	10475	40x8	40x8D
Federal X 8 R D R	*7½	4735	Con	H	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Borg	Pet	Ross	Zen	P	DR	Br-L	7	Tim	2R	106.0	T21MV	462	162	10475	40x8	40x8D
Ford AA	1½	495	Own	L	4	3⅞x4¼	200.5	24.0	40@2200	G	Own	Long	Spic	Gem	Zen	Gra	Own	Own	4	Own	S-T	42 2	O4IM	358	131½	*2866	20x6.00B	32x6
Ford AA	1½	525	Own	L	4	3⅞x4¼	200.5	24.0	40@2200	G	Own	Long	Spic	Gem	Zen	Gra	Own	Own	4	Own	S-T	42 2	O4IM	358	157	2738	20x6.00B	32x6
General Motors T-15	*6500	645	Own	L	6	3⅛x3⅞	200.3	26.3	60@3000	C	Long	Own	Mec	Sag	Mar	P	DR	Own	3	Own	Sp	16 1	B4IM	308	130	2625	20x5.50B	20x5.50B
General Motors T-18	*8200	595	Own	L	6	3⅛x3⅞	200.3	26.3	66@3200	C	Long	Own	Own	Sag	Mar	P	DR	Own	4	Own	Sp	35 7	O4IM	361	131	2800	30x5P	32x6P
General Motors T-19	*10000	745	Own	L	6	3⅛x3⅞	200.3	26.3	66@3200	C	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	40.7	B4IM	377	140	3110	20x5.50B	32x6P
General Motors T-25	*9000	1200	Buick	H	6	3⅛x4⅝	257.5	28.3	76@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	29 6	B4IM	377	130	3375	20x6.00B	20x7.50B
General Motors T-26	*11000	1210	Buick	H	6	3⅛x4⅝	257.5	28.3	76@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	35.7	B4IM	427	130	3685	20x6.50B	20x8.25B
General Motors T-30	*12500	1545	Buick	H	6	3⅛x4⅝	257.5	28.3	76@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	28 6	B4IM	452	141	4490	30x5P	30x5DP
General Motors T-31	14000	1695	Own	H	6	3⅛x4⅝	257.5	28.3	76@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	35 5	B4IM	524	141	4695	32x6P	32x6DP
General Motors T-42	*15000	1845	Buick	H	6	3⅛x4⅝	257.5	28.3	76@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	33 4	B4IM	524	141	4725	32x6P	32x6DP
General Motors T-44	*16000	1935	Buick	H	6	3⅛x4⅝	257.5	28.3	76@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	40.9	B4IM	524	141	5005	32x6P	32x6DP
General Motors T-45	*16000	1865	Own	H	6	3⅛x4⅝	257.5	28.3	76@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	41 1	B4IM	524	141	4910	32x6P	32x6DP
General Motors T-51	*19000	2465	Own	H	6	3¾x5	331.4	33.7	94@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Sp	40 6	B4IMV	574	155	5955	34x7P	34x7DP
General Motors T-60	*22000	3035	Buick	H	6	3¾x5	331.4	33.7	94@2500	G	Long	Own	Spic	Sag	Mar	P	DR	Own	4	Own	Wo	52 5	B4IM	685	154	6925	34x7P	34x7DP
General Motors T-61	*22000	3445	Own	H	6	3¾x5	331.4	33.7	94@2500	G	Long	Own	Spic	Sag	Str	P	DR	Own	4	Own	Wo	52 5	B4I

Major Specifications and Mechanical Details of 1932 Commercial Cars

LEADING MAKES NATIONALLY DISTRIBUTED

(Continued from Page 13)

Make and Model	Capacity—Tons or Lbs.	Chassis Price	Engine	Valve Arr'g'm't	No. of Cyls.	Bore and Stroke	Piston Disp.	Tax H. P.	Max. Brake H. P. and Peak R. P. M.	Type Camshaft Drive	Radiator Make	Clutch Make	Universals Make	Steering Gear Make	Carburetor Make	Fuel Feed Type	Make Electr'l System	Make Transmission	No. Spds. For.	Rear Axle Make	Rear Axle Type	Final Gear Reduction	Type Service Brakes	Area Service Brakes	Standard Wheel Base	Chassis Wgt.	Standard Tire Sizes Front	Standard Tire Sizes Rear
La France Rep. A 1	6000	795	Lyc	L	6	3 x4¾	201.5	21.5	60@2500	G	G&O	Borg	Spic	Han	Zen	Vac	Aut	Ful	4	Tim	Sp	36.1	L4IH	378	132	3000	20x5 50	32x6
La France Rep. C 1	7500	1295	Lyc	L	6	3½x4½	224.0	25.4	61@2750	G	G&O	Borg	Spic	Han	Zen	Vac	Aut	Ful	4	Tim	Sp	35.8	L4IH	413	144	3300	20x6 00	32x6
La France Rep. C-2	10000	995	Lyc	L	6	3¼x4½	224.0	25.3	61@2800	G	Per	Borg	Spic	Han	Zen	P	Aut	Ful	4	Tim	Sp	35.9	L4IH	—	150	—	20x6.00B	20x6.00DB
La France Rep. D 1	9000	1595	Lyc	L	6	¾x4½	224.0	25.4	61@2750	G	G&O	Borg	Spic	Han	Zen	Vac	Aut	Ful	4	Tim	Sp	37.9	L4IH	443	144	3725	30x5	30x5D
La France Rep. D-2	11500	1295	Lyc	L	6	3⅜x4½	242.0	27.3	65@2800	G	Per	Borg	Spic	Han	Zen	P	Aut	Ful	4	Tim	Sp	37.9	L4IH	—	162	—	20x6.50B	20x6.50DB
La France Rep. E-1	13000	1985	Bud	L	6	3½x4½	260.0	29.5	69@2600	G	Per	Borg	Spic	Ross	Zen	Vac	Aut	Ful	4	Tim	Sp	47.0	L4IHV	578	162	5000	20x7 50	20x7 50D
La France Rep. F-3	15000	2395	Lyc	L	6	3¾x4½	299.0	33.7	80@2500	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	4	Tim	Sp	50.6	L4IHV	656	174	5625	34x7	34x7D
La France Rep. H 2	16000	2985	Lyc	L	6	3⅞x5	354.0	36.0	85@2300	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	4	Wis	2R	41.6	L4IHV	658	174	6370	34x7	34x7D
La France Rep. H-3	18000	3395	Bud	L	6	4⅛x4¾	393.0	42.1	94@2400	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	4	Tim	2R	54 0	L4IHV	768	179	7450	20x9.75B	20x9.75DB
La France Rep. M 2	20000	4000	Wak	L	6	4⅜x5½	462.0	46.0	97@2000	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	5	Wis	2R	51.0	L4IHV	768	174	7500	36x8	36x8D
La France Rep. M-3	22000	4750	Wak	L	6	4⅜x5½	462.0	46.0	97@2000	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	5	Tim	2R	62.5	L4IHV	768	191	8300	20x10 50B	20x10.50DB
La France Rep. S5-2	24000	5600	Wak	L	6	4½x5¾	549.0	48.6	93@1850	G	Own	Ful	Spic	Ross	Zen	P	Aut	Ful	5	Wis	2R	45.4	L4IHV	870	174	9250	38x9	38x9D
La France Rep. S5-3	28000	5900	Wak	L	6	4⅝x5½	517.0	51.0	100@1800	G	Per	Ful	Spic	Ross	Zen	P	Aut	Ful	12	Tim	2R	111.5	W4IA	1054	191	10300	24x10 50B	24x10.50DB
La France Rep. Q-4	30000	8500	Own	H	12	4 x5	754.0	76.7	240@2900	C	Own	Long	Bio	Ross	Zen	P	DR	Br-L	4	Tim	4R	Opt	W4IA	—	Opt	12750	24x10.50B	24x10.50DB
La France Rep. Q-8	40000	11000	Own	H	12	4 x5	754.0	76.7	240@2900	C	Own	Long	Bio	Ross	Zen	P	DR	Br-L	4	Tim	4R	Opt	W6IA	—	Opt	14900	20x10.50B	20x10.50DB
††Mack B L	—	2500	Own	L	6	3¼x5	248.9	25.3	63@2800	G	Own	Own	Spic	Gem	Str	Vac	NE	Own	4	Tim	Sp	Opt	L4IH	302	118	*4450	20x6.00B	20x6.00DB
††Mack B G	—	3000	Own	L	6	3⅜x5	309.6	31.5	75@2600	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	Sp	Opt	O4IV	415	156	5200	32x6	32x6D
††Mack A B	—	4350	Own	L	4	4¼x5	283.7	28.9	60@2200	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	2 R	Opt	O4IV	471	146½	7100	34x7	34x7D
Mack A B	—	4000	Own	L	4	4¼x5	283.7	28.9	60@2200	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	Ch	Opt	O4IV	471	146½	6850	34x7	34x7D
Mack A B	—	4500	Own	L	6	3⅜x5	309.6	31.5	75@2600	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	2 R	Opt	O4IV	471	146½	7050	34x7	34x7D
††Mack A B	—	4150	Own	L	6	3⅜x5	309.6	31.5	75@2600	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	Ch	Opt	O4IV	471	146½	6850	34x7	34x7D
††Mack B C	—	5250	Own	L	6	4 x5½	417.7	38.4	100@2300	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	2 R	Opt	O4IV	471	154	8350	36x8	36x8D
††Mack B C	—	5500	Own	L	6	4 x5½	417.7	38.4	100@2300	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	Ch	Opt	O4IV	619	154	8500	36x8	36x8D
††Mack B J	—	6150	Own	L	6	4½x5½	525.2	48.6	126@2200	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	2 R	Opt	O4IV	587	168½	10100	36x8	36x8D
††Mack A K	—	5150	Own	L	4	5 x6	471.2	40.0	77@1800	G	Ow	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	O4IV	492	162	9800	36x58	36x5DS
††Mack A K	—	5250	Own	L	4	5 x6	471.2	40.0	77@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	2 R	Opt	O4IV	492	162	9700	36x58	36x5Ls
††Mack A C	—	4950	Own	L	4	5 x6	471.2	40.0	77@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	OJXM	194	156	9500	36x58	40x5DS
††Mack A K	—	6450	Own	L	6	4½x5½	525.5	48.6	126@2200	G	Own	Own	Spic	Han	Str	Vac	NE	Own	4	Own	2 R	Opt	O4IV	492	174	10950	22x10.50B	22x10.50DS
††Mack A C	—	5500	Own	L	4	5 x6	471.2	40.0	77@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	OJXM	194	156	10100	36x6S	40x6DS
††Mack A C	—	6550	Own	L	6	4½x5½	525.5	48.6	126@2200	G	Own	Own	Spic	Han	Str	Vac	NE	Own	4	Own	Ch	Opt	O4IV	492	174	11950	24x10 50B	24x10.50DB
††Mack A C	—	6000	Own	L	4	5 x6	471.2	40.0	77@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	OJXM	194	156	10450	36x7S	40x7DS
††Mack A P	—	9500	Own	L	6	5 x6	706.5	60.0	150@2000	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	O2IV	287	191	12200	36x7S	40x8DS
††Mack A K 6—6 wheel	—	9500	Own	L	6	4½x5½	525.2	48.6	126@2200	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	2 R	Opt	O6IA	574	152-52	16300	9.75x22B	5.75x22DB
††Mack A C 6 wheel	—	7650	Own	L	4	5 x6	471.2	40.0	77@1800	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	Ch	Opt	ORIV	574	125-52	13800	36x6S	40x12S
††Mack A C 6—6 wheel	—	9000	Own	L	6	4½x5½	525.2	48.6	126@2200	G	Own	Own	Spic	Own	Str	Vac	NE	Own	4	Own	Ch	Opt	O6IA	574	145 52	14950	40x8	40x8D
Mack A P 6 wheel	—	11500	Own	L	6	5 x6	706.5	60.0	150@2000	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	2 R	Opt	O6IA	574	145-52	15250	40x8	40x8D
††Mack A P 6 wheel	—	12000	Own	L	6	5 x6	706.5	60.0	150@2000	G	Own	Own	Spic	Own	Str	Gra	NE	Own	4	Own	2 R	Opt	O6IA	574	145-52	—	22x9.75B	22x9 75B
Pierce-Arrow	2	3150	Own	L	8	3½x5	385.0	39.2	125@2800	C	Long	Long	Cle	Han	Str	P	DR	Br-L	4	Tim	Sp	33.5	B4IM	390	160	6000	20x8.25B	20x8.25DB
Pierce-Arrow	2½	3000	Her	L	6	4⅛x4½	361.0	40.3	77@2400	G	Long	Long	Cle	Han	Zen	P	DR	Cla	4	Tim	Sp	34.3	B4IM	399	150	5625	20x7.50B	20x7.50DB
Pierce-Arrow	2½	3000	Her	L	6	3¾x4½	298.0	33.7	70@2600	G	Long	Long	Cle	Han	Zen	P	DR	Cla	4	Tim	Sp	64.0	B4IM	399	150	5725	20x8.25B	20x8.25DB
Pierce-Arrow	2½	3200	Her	L	6	4⅛x4½	361.0	40.3	77@2400	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Sp	34.4	B4IM	399	180	5800	20x8.25B	20x8.25DB
Pierce-Arrow	3-4	4150	Her	L	6	4⅛x4½	361.0	40.3	77@2400	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	41.9	B4IA	473	150	6660	20x9.00B	20x9.00DB
Pierce-Arrow	3-4	——	Her	L	6	4⅜x4¾	428.0	46.0	94@2200	G	Long	Long	Cle	Han	Zen	P	DR	Br-L	4	Tim	Wo	28.6	B4IA	473	150	6860	20x9.00B	20x9.00DB
Pierce-Arrow	3½	——	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Br-L	4	Tim	Wo	36.0	B4IA	473	150	7050	20x9.75B	20x9.75DB
Pierce-Arrow	4-5	5400	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Tim	Wo	40.2	T4IA	618	150	9250	20x10.50B	20x10.50DB
Pierce-Arrow	4-5	——	Her	L	6	4⅝x5¾	611.0	54.1	130@2000	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Tim	Wo	39.8	T4IA	618	150	10200	20x10.50B	20x10.50DB
Pierce-Arrow	5½	——	Her	L	6	4½x5¼	501.0	48.6	110@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Own	Wo	53.0	TO4IA	720	160	10675	24x10.50B	24x10.50DB
Pierce-Arrow	5½	——	Her	L	6	4⅝x5¾	611.0	54.1	130@2000	G	Lon?	Long	Spic	Ross	Str	P	DR	Own	4	Own	Wo	52.5	TO4IA	720	160	11600	24x10.50B	24x10.50DB
Pierce-Arrow	5½	5950	Her	L	6	4⅝x4¾	479.0	51.3	104@2200	G	Long	Long	Cle	Han	Zen	P	DR	Cov	4	Own	Wo	53.0	TO4IA	728	160	10675	24x10.50B	24x10.50DB
Pierce-Arrow	5½	——	Her	L	6	4⅝x5½	611.0	54.1	130@2000	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Own	Wo	42.0	TO4IA	720	170	11675	24x10.50B	40x8DS
Pierce-Arrow	—	——	Her	L	6	5½x5	779.0	66.1	150@1800	G	Long	Long	Spic	Ross	Str	P	DR	Own	4	Own	Wo	51.9	TO4IA	720	190	12750	24x10.50B	24x10.50DB
Relay Series 15 AA	¾	1370	Con	L	6	3⅜x4	214.7	27.3	52@2200	C	Long	Borg	Bio	Han	Str	Vac	Aut	W-G	4	Own	2 R	38.4	L4IH	297	131	3750	30x5P	30x5P
Relay Series 15 AB	1	1400	Con	L	6	3⅜x4	214.7	27.3	52@2200	C	Long	Borg	Bio	Han	Zen	Vac	Aut	W-G	4	Own	2 R	38.4	L4IH	297	131	3800	30x5P	30x5P
Relay Series S 11 BA	1	1700	Bud	L	6	3⅜x4½	241.6	27.3	53@2200	G	Long	Br-L	Bio	Han	Zen	Vac	Aut	Br-L	4	Own	2 R	25.5	L4IH	297	142	4050	30x5P	30x5P
Relay Series S 11 BB	1½	1900	Bud	L	6	3⅜x4½	241.6	27.3	53@2200	G	Long	Br-L	Bio	Han	Zen	Vac	Aut	Br-L	4	Own	2 R	30.0	L4IH	297	162	4500	30x5P	30x5DP
Relay 40 CA	1½	3040	Bud	L	6	3⅜x5	331.0	33.7	64@2100	G	Long	Ful	Bio	Han	Zen	Vac	Aut	Ful	4	Own	2 R	41.8	L4IH	394	168	5550	34x5P	34x5DP
Relay 40 CB	2	3290	Bud	L	6	3⅜x5	331.0	33.7	64@2100	G	Long	Ful	Bio	Han	Zen	Vac	Aut	Ful	4	Own	2 R	41.8	L4IH	394	168	5750	36x6P	36x6DP
Relay Series 50 DA	2	3860	Bud	L	6	3⅜x5	331.0	33.7	64@2100	G	Long	Br-L	Bio	Han	Zen	Vac	Aut	Br-L	5	Own	2 R	58.5	L4IH	584	161	6800	36x5	36x6D
Relay Series S 11 BC	2	2030	Bud	L	6	3⅜x4½	241.6	27.3	53@2200	G	Long	Br-L	Bio	Han	Zen	Vac	Aut	Br-L	4	Own	2 R	30.0	L4IH	297	162	4700	32x6P	32x6DP
Relay 40 CC	2½	3325	Bud	L	6	3⅜x5	331.0	33.7	64@2100	G	Long	Ful	Bio	Han	Zen	Vac	Aut	Ful	4	Own	2 R	41.8	L4IH	394	168	5950	36x6P	36x6DP
Relay Series 50 DB	2½	4000	Bud	L	6	3⅜x5	331.0	33.7	64@2100	G	Long	Br-L	Bio	Han	Zen	Vac	Aut	Br-L	5	Own	2 R	58.5	L4IH	584	161	7000	36x6	38x7D
Relay Series 60 DA	2½	4555	Bud	L	6	4⅛x5⅛	410.9	40.8	83@2100	G	Long	Ful	Bio	Han	Zen	Vac	Aut	Ful	5	Own	2 R	58.5	L4IH	584	175	7350	36x6	38x6D
Relay Series 50 DC	3	4130	Bud	L	6	3⅜x5	330.0	33.7	64@2100	G	Long	Br-L	Bio	Han	Zen	Vac	Aut	Br-L	5	Own	2 R	58.5	L4IH	584	161	7200	36x6	40x8D
Relay Series 60 DB	3	4595	Bud	L	6	4⅛x5⅛	410.9	40.8	83@2100	G	Long	Ful	Bio	Han	Zen	Vac	Aut	Ful	5	Own	2 R	58.5	L4IH	584	175	7500	36x6	38x7D
Relay Series 60 DC	3½	4745	Bud	L	6	4⅛x5⅛	410.9	40.8	83@2100	G	Long	Ful	Bio	Han	Zen	Vac	Aut	Ful	5	Own	2 R	58.5	L4IH	584	175	7800	38x7	40x8D
Relay Series 100 AC	5	6615	Con	L	6	4⅜x4¾	428.4	45.9	100@2200	C	Long	Ful	Bio	Han	Str	Vac	Aut	Br.L	12	Own	2 R	58.5	W4IA	447	230	10000	24x9.00	24x9 00D
Relay 230	5	6750	Her	L	6	4¾x5¾	611.0	54.0	126@2000	G	Mod	Long	Spic	Ross	Zen	P	Aut	Ful	5	Own	2 R	89.1	L4IHV	529	196	11600	10.50x24B	10.50x24DB
*Relay Series 60 SW	7½	6545	Bud	L	6	4⅛x5⅛	411.0	40.8	100@2200	G	Long	Ful	Bio	Han	Zen	Vac	Aut	Ful	5	Own	2 R	63.6	L4IH	744	175	12000	38x7P	40x8DP
Relay Series 100 B	7½	6900	Bud	L	6	4¾x6	638.0	54.1	118@1850	G	Mod	Br-L	Bio	Han	Zen	P	Aut	Br-L	4	Own	2 R	49.7	L4IH	480	220	11200	24x9 75	24x9 75D
Relay 240	7½	7900	Her	L	6	5¼x6	779.0	66.1	164@2000	G	Mod	Long	Spic	Ross	Zen	P	Aut	Br.L	12	Own	2 R	93.1	CR4IA	637	174	12900	12.00x24B	12.00x24DB
Reo 1 A	1½	625	Own	L	4	3⅛x4½	205.0	23.3	51@2500	G	Per	Long	Cle	Ross	Zen	P	DR	Cla	4	Cla	Sp	37.1	L4IH	230	136	2930	20x6.00	32x6
Reo 1 B	1½	725	Own	L	6	3⅜x4	214.7	27.3	61@3000	G	Per	Long	Cle	Ross	Zen	P	DR	Cla	4	Cla	Sp	33.6	L4IH	230	136	2970	20x6.00	32x6
Reo 1 C	1½	665	Own	L	4	3⅛x4½	205.0	23.3	51@2500	G	Per	Long	Cle	Ross	Zen	P	DR	Cla	4	Cla	Sp	37.1	L4IH	230	160	3020	20x6.00	32x6
Reo 1 D	1½	765	Own	L	6	3⅜x4	214.7	27.3	61@3000	G	Per	Long	Cle	Ross	Zen	P	DR	Cla	4	Cla	Sp	37.1	L4IH	230	160	3060	20x6.00	32x6
Reo D F X	1½	1095	Own	L	6	3⅜x5	268.3	27.3	85@3200	C	Own	Long	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.1	L4IH	289	135	3200	20x6.00	20x6.00
Reo F A X	2	1295	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	Own	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.3	L4IH	289	137	3525	20x6.00	32x6
Reo F E X	2	1395	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	Own	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.3	L4IH	289	152	3200	20x6.00	32x6
Reo F F X	2	1395	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	Own	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	34.3	L4IH	289	156	3525	20x6.00	32x6
Reo F H X	2½	1595	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	37.7	L4IH	289	142	3750	32x6	32x6D
Reo F C X	2½	1645	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	37.7	L4IH	289	152	4165	32x6	32x6D
Reo F D X	2½	1745	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	37.7	L4IH	289	168	4075	32x6	32x6D
Reo G A	3	2035	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	40.5	L4IH	344	163	4625	32x6	32x6D
Reo G C	3	2140	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	40.5	L4IH	344	179	4850	32x6	32x6D
Reo G D	3	2085	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	78.1	L4IH	344	144	4650	32x6	32x6D
Reo G C S	3	2375	Own	L	6	3⅜x5	268.3	27.3	70@2800	C	MeC	Br-L	Cle	Ross	Sch	Vac	DR	Own	4	Own	Sp	40.5	L4IH	344	210	5300	32x6	32x6D
Reo 4-H	4	2800	Own	L	6	4⅛x4¾	381.0	40.8	101@2600	G	MeC	Long	Cle	Ross	Sch	P	DR	Own	4	Cla	Sp	42.4	L4IHV	390	150	6150	8.25x20	9.00x20B
Reo 4-J	4	2875	Own	L	6	4⅛x4¾	381.0	40.8	101@2600	G	MeC	Long	Cle	Ross	Sch	P	DR	Own	4	Cla	Sp	42 4	L4IHV	390	170	6280	8.25x20	9.00x20B
Reo 4-K	4	2950	Own	L	6	4⅛x4¾	381.0	40.8	101@2600	G	MeC	Long	Cle	Ross	Sch	P	DR	Own	4	Cla	Sp	42.4	L4IHV	390	190	6395	8.25x20	9.00x20B
Sterling FB-30	1½	795	Con	L	6	3⅜x4	214.7	28.0	72@3300	C	Per	Borg	Spic	Ross	Zen	P	DR	War	4	Tim	St	37.6	L4IH	269	142	3300	20x6.50B	20x6 50B
Sterling FB-45	2	1485	Con	L	6	3⅜x4⅜	248.0	28.0	66@3000	C	Per	Borg	Spic	Ross	Zen	P	DR	War	4	Cla	St	36.2	L4IH	278	159	4230	20x6.50B	20x6.50DB
Sterling FB-55	2-2½	1850	Con	L	6	3⅜x4⅜	248.0	28.0	66@3000	C	Per	Br-L	Spic	Ross	Zen	P	DR	Br-L	4	Tim	St	36.3	L4IHV	282	159	4950	20x7.00B	20x7.00DB
Sterling FB-80	3	3080	Wak	L	6	3⅜x4⅜	315.0	33.7	72@2500	G	Mod	Own	Spic	Han	Zen	P	DR	Own	4	Tim	St	49.5	L4IHV	392	174	6480	20x8.25B	20x8.25DB
Sterling FD-80	3	3275	Wak	L	6	4 x4¾	358.0	38.4	80@2500	G	Mod	Own	Spic	Han	Zen	P	DR	Own	5	Wis	2R	55.7	L4IHV	396	174	6680	20x8.25B	20x8.25DB
Sterling F C 100	3½	4950	Wau	L	6	4⅛x4⅜	381.0	40.8	85@2500	G	Mod	Own	Spic	Ross	Zen	P	DR	Own	4	Own	—	61.2	O2IMV	876	192	7750	36x8P	36x8DP
Sterling FC 60	4	4200	Wak	L	6	4⅛x4¾	381.0	40.8	85@2500	G	Mod	Own	Spic	Han	Zen	P	DR	Own	4	Own	—	56.3	O2IMV	466	174	7480	20x9.00B	20x9.00DB
Sterling FC-120	4-5	5350	Wak	L	6	4⅛x4¾	381.0	40.8	85@2500	G	Mod	Own	Spic	Ross	Zen	P	DR	Own	4	Own	—	62.2	O2IMV	500	192	8550	40x8P	40x8DP
Sterling FC-135	5	5825	Wak	L	6	4⅜x5½	462.0	45.9	102@2400	G	Mod	Own	Spic	Ross	Zen	P	DR	Own	4	Own	—	62.2	O2IMV	500	192	8900	40x8P	40x8DP
*Sterling F C S 170	—	10210	Wau	L	6	4¼x5¾	489.0	43.4	90@2000	G	Mod	Own	Spic	Ross	Zen	P	DR	Own	4	Own	—	63.2	WS4IA	792	—	14100	36x8P	36x8DP
*Sterling F C S 180	—	10405	Wau	L	6	4½x5¾	549.0	48.6	99@2000	G	Mod	Own	Spic	Ross	Zen	P	DR	Own	4	Own	—	59.6	WS4IA	792	—	14550	40x8P	40x8DP
*Sterling F C S 210	—	10825	Wau	L	6	5 x5¾	677.0	60.0	125@2000	G	Mod	Own	Spic	Ross	Zen	P	DR	Own	4	Own	—	59.6	WS4IA	792	—	14750	40x8P	*40x8D
Stewart 30	1	695	Lyc	L	4	3¾x4½	199.0	22.5	50@2600	G	Fed	Borg	Spic	Ross	Str	P	DR	W-G	4	Sal	Sp	35.1	B4IM	257	130	*3158	20x6.50	20x6.50
Stewart 30 X	1	795	Lyc	L	6	3 x4¾	201.5	23.8	60@2800	G	Fed	Borg	Spic	Ross	Str	P	DR	W-G	4	Sal	Sp	35.1	B4IM	257	130	3199	20x6.50	20x6 50
Stewart 40 X A	1½	995	Lyc	L	6	3¼x4½	224.0	25.3	62@2600	G	Fed	Borg	Spic	Ross	Zen	P	DR	W-G	4	Sal	Sp	35.1	B4IM	257	145	3574	20x6.50	20x6.50D
Stewart 50X	2	1195	Lyc	L	6	3⅜x4½	242.0	27.3	65@2800	G	Fed	Borg	Spic	Ross	Str	P	DR	W-G	4	Cla	Sp	38.1	B4IM	257	145	4165	20x6.50	20x6.50DB
Stewart 20 X S	2	1695	Lyc	L	6	3¾x4½	298.0	33.7	85@2750	G	Fed	Ful	Spic	Ross	Str	P	DR	Ful	4	Cla	Sp	44.1	B4IM	307	145	5194	20x7.00	20x7 00D
Stewart 32 X	2½	1990	Lyc	L	6	3¾x4½	298.0	33.7	85@2750	G	Fed	Ful	Spic	Ross	Str	P	DR	Ful	4	Cla	Sp	46.1	B4IM	348	165	6552	20x7.00	20x7.00D
Stewart 58-8	2½	2390	Lyc	L	8	3¾x4½	322.0	36.5	100@2800	G	Fed	Ful	Spic	Ross	Str	P	DR	Ful	4	Cla	Sp	48.1	B4IM	348	170	6170	20x7.50	20x7.50DB
*Stewart 18 X	3	2690	Lyc	L	6	3⅞x5	310.0	36	85@2750	G	Fed	Ful	Spic	Ross	Str	P	DR	Ful	4	Tim	Wo	48.1	B4IM	452	165	6245	20x7.50	20x7.50D
Stewart 48-8	3	2990	Lyc	L	8	3¾x4¾	420.0	45.0	130@2800	G	Fed	Br-L	Spic	Ross	Str	P	DR	Br-L	4	Cla	Sp	46.1	B4MV	348	170	6750	8.25x20B	8.25x20DB
Stewart 19 X	3½	3690	Lyc	L	6	3⅞x5	354.0	36.2	90@2750	G	Mod	Ful	Spic	Ross	Str	P	DR	Ful	12	Tim	Wo	105.1	B4IM	452	165	7474	20x9.00	20x9.00D
Stewart 38-8	3½	3990	Lyc	L	8	3¾x4¾	462.0	45.0	130@2800	G	Fed	Borg	Spic	Ross	Str	P	DR	Br-L	12	Tim	2R	105 1	B4IMV	452	170	7964	20x9.00	20x9.00D
Stewart 38-6	3½	3990	Wak	L	6	4⅜x5⅛	420.0	45.9	100@2000	G	Fed	Borg	Spic	Ross	Str	P	DR	Br-L	12	Tim	2R	105.1	B4IMV	452	170	7964	20x9.00	20x9 00D
Stewart 31 X	5	5190	Wak	L	6	4⅝x5⅛

Cumulative New Commercial Car Registration Statistics, February, 1932

Returns for today: Florida, Idaho, Michigan, Minnesota and South Carolina.

In this table, 12 states.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	International	La France Republic	Mack	Pierce-Arrow	Reo	Sterling	Stewart	Studebaker	White	Willys-Overland	Miscellaneous	Totals	States
Delaware			22				32	3	6								1		4	68	Delaware
Florida			157		14	1	194	9	23				9				3	1	4	415	Florida
Idaho			16		5		11		6				1				1	1	4	45	Idaho
Illinois	3	4	274	41	45	18	154	50	92	1	5		7	2	1	10	4	8	39	758	Illinois
Maryland	3	5	105	1	10	1	62	7	21			1	5			2	5	1	1	230	Maryland
Michigan			169		14	7	171	18	26	2			10		1	14		4	15	451	Michigan
Minnesota			163	10	25	2	120	9	34	1	5		9		1	8	7	2	2	398	Minn.
North Dakota			10				13		6							1				30	Nor. Dak.
So. Carolina			47		2	1	40	6								2			2	100	So. Car.
South Dakota			29		4		15	1	15							2		1		67	S. Dakota
West Virginia		1	50		10		41	6	8				3				1	4	1	125	West Va.
Wisconsin			122	5	5	2	87	13	17	1	1		5	1		6	1	2	14	282	Wisconsin
Totals	6	10	1164	57	134	32	940	122	254	5	11	1	49	3	3	45	23	24	86	2969	Totals
Delaware, '31			24		1		30	2			1				1					59	Del., 1931
Florida, 1931		1	124		6		242	2	4				3				4		3	389	Fla., 1931
Idaho, 1931			36		4		51	2	3								1		2	99	Idaho, '31
Illinois, 1931	10	5	382	36	70	9	646	23	142	1	11		18	2	5	13	2	18	46	1439	Illinois, 31
Maryland, '31		2	88	6	5	8	138	6	13		7		8		1	4	6	3	3	298	Md., 1931
Michigan, '31			199		30	7	448	18	42	2	4		13			6	2	5	18	794	Mich., '31
Minnesota, '31			101		16	2	127	2	23	3			3			4	4	4	7	296	Minn., '31
Nor. Dak., '31			35		5		30	1	17										1	89	N. D., 1931
So. Car., 1931		1	114		8		99	1	10		1		1				1		1	237	S. C., 1931
S. Dak., 1931			82	5	11		56		54				4			8		4	1	225	S. Dak., '31
West Va., '31	5	1	66		19		101	6	10				1			2	1	2	2	216	W. Va., '31
Wisconsin, '31			179	2	11	3	183	13	25		1		1	4	1	10		7	12	452	Wis., 1931
Totals	15	10	1430	49	186	29	2151	76	343	6	25		52	6	8	47	21	43	96	4593	Totals

ERIE R. R. EXTENDS PASSENGER SERVICE DIRECT TO HOME

New York, March 17.—For the first time in the history of transportation in New York, it is now possible to complete a railroad journey direct to your own door or to start a trip from your home, on a railroad ticket.

This innovation in the selling of railway tickets into New York city becomes effective today. Tickets of the Erie Railroad now include transportation from the train at the Erie Terminal in Jersey City by taxicab to all points in Manhattan south of 110th Street and to all points in the business section of Brooklyn at a per capita charge of 85 cents for adults and 45 cents for children. The perfecting of this arrangement between the Parmelee system, operating the cabs, and the Erie Railroad enables passengers traveling to New York to buy a taxicab coupon with their rail ticket at the ticket office or from conductors on any through trains. The taxicab will be awaiting the arrival of the passenger at the Erie Terminal.

Traveling from New York the passenger buys the taxicab coupon with rail ticket. The ticket agent will arrange to have a taxicab sent to the passenger's home, hotel or office or, if preferred, he may phone for a Parmelee System taxicab or hail one on the street.

N. J. RECIPROCITY BILL FOR ALL-YEAR OPERATION OF BOTH CARS, TRUCKS

Trenton, N. J., March 17.—Hudson, Bergen and Camden county motorists and truck owners would be the chief beneficiaries of a reciprocity bill passed by the assembly yesterday.

The measure, which is now before the Senate, would permit New Jersey to enter into reciprocity agreements with other states. It is designed mainly to obtain for New Jersey residents the benefits of all-year reciprocity with New York and Pennsylvania and thus save them the expense of paying extra registration fees in those states.

New Jersey residents, at present, must obtain the extra licenses if their trucks are in use more than fifteen days in New York and Pennsylvania. Those states, according to Assemblyman Tamboer of Passaic, sponsor of the bill, give to other states the same reciprocity terms as are given there to their own motorists.

New Jersey allows only the 15-90 terms. Assemblyman Rothermel of Camden declared that Hudson county, because of its proximity to New York and with the Holland Tunnel; Bergen county, with the new Washington Bridge serving to increase business with the metropolis, and Camden, because its new bridge has aided business with Philadelphia, will be the greatest beneficiaries of the measure. Assemblyman Wise of Passaic said that a survey of the Traffic Commission showed that the bill would bring "very little loss of revenue to New Jersey"

Major Specifications and Mechanical Details of 1932 Commercial Cars

LEADING MAKES NATIONALLY DISTRIBUTED

(Continued from Page 14)

Make and Model	Capacity—Tons or Lbs.	Chassis Price	Engine	Valve Arr'g'm't	No. of Cyls.	Bore and Stroke	Piston Disp.	Tax H. P.	Max. Brake H. P. and Peak R. P. M.	Type Camshaft Drive	Radiator Make	Clutch Make	Universals Make	Steering Gear Make	Carburetor Make	Fuel Feed Type	Make Electr'l System	Make Transmission	No. Spds. For.	Rear Axle Make	Type Final Drive	Final Gear Reduction	Type Service Brakes	Area Service Brakes	Standard Wheel Base	Chassis Wgt.	Standard Tire Sizes Front	Rear
Willys-Overland 6-C-113	1/2	415	Own	L	6	3 1/4x3 7/8	193.0	25.3	65@3400	C	Fed	Own	Spic	Own	Til	P	Aut Own	3	Own	Sp	12.4	B4IM	143	113	1923	20x5.50	32x6
Willys-Overland 6-C-131	1 1/2	595	Own	L	6	3 1/4x3 7/8	193.0	25.3	65@3400	C	Fed	Own	Spic	Own	Til	P	Aut W-G	4	Cla	Sp	40.8	B4IM	235	131	2625	20x5.50	32x6
WillysOverland 6-C-157	1 1/2	635	Own	L	6	3 1/4x3 7/8	193.0	25.3	65@3400	C	Fed	Own	Spic	Own	Til	P	Aut W G	4	Cla	Sp	40.8	B4IM	235	157	2900	19x5.00	19.x5.00

GENERAL NOTATIONS

*†**REFERENCE MARKS** apply to individual lines only and explanations are given under the subdivision for each company in the "SPECIAL NOTATIONS."

CAPACITIES given in this table are in tons or fractions of tons. *Shows maximum allowable gross weight in pounds.

ENGINE—Bud, Buda; Con, Continental; Her, Hercules; Lyc, Lycoming; Pont, Pontiac; Wak, Waukesha; Wis, Wisconsin; Hall, American Car & Foundry; Ster, Sterling Engine Co.

VALVE ARRANGEMENT—L, "L" head; H, in head; O, overhead; S, sleeve.

TYPE OF CAMSHAFT DRIVE—G, gear; C, chain.

RADIATOR MAKE—G&O, G & O Mfg. Co.; Per, Perfex Corp.; Long, Long Mfg. Co.; Har, Harrison Radiator Corp.; Fed, Fedders Mfg. Co.; McC, McCord Radiator & Mfg. Co.; Mod, Modine Mfg. Co.; Hex, Hexcel Radiator Co.

CLUTCH MAKE—Jon, Jones Clutch & Gear Co.; Ful, Fuller & Sons Mfg. Co.; Borg, Borg & Beck Co.; Br-L, Brown Lipe Gear Co.; Rock, Rockford Drill & Machine Co.; Cov, Covert Gear Co.; Long, Long Mfg. Co.; Detr, Detroit Gear & Machine Co.; Mer, Merchant & Evans; Hel, Merchants & Evans.

UNIVERSALS MAKE — Spic, Spicer Mfg. Co.; Blo, Blood Bros. Machine Co.; Sup, Superior Universal Products; Un, Universal Products Co.; Cle, Cleveland Steel Products Corp.; Pet, Peters; Opt, Optional; Mec, Mechanics Machine Co.

STEERING GEAR MAKE—Ross, Ross Gear & Tool Co.; Han, Hannum Mfg. Co.; Sag, Saginaw Steering Gear Co.; Gem, Gemmer Mfg. Co.; Col, Columbus Gear Pump Co.; W-G, Warner Gear Corp.

CARBURETOR—Car, Carter; Mar, Marvel; Sch, Wheeler-Schebler; Str, Stromberg; DL, Detoit Lubricator; Til, Tillotson; Zen, Zenith-Detroit.

FUEL FEED—Gra, gravity; Vac, vacuum tank, P, fuel pump.

ELECTRICAL SYSTEM — AB, American-Bosch; Aut, Electric Auto-Lite; Eis, Eisemann; L-N, Leece-Neville; NE, North East; RB Robert Bosch; DR, Delco-Remy.

TRANSMISSION—Br-L, Brown-Lipe; Cov, Covert; Ful, Fuller; Mec, Mechanics Machine; Mun, Muncie; W-G, Warner Gear; Cot, Cotta Gear Co.; Cla, Clark Equipment Co.

REAR AXLE—Cla, Clark Equipment; Col, Columbia; Eat, Eaton; Pont, Pontiac; Sal, Salisbury; Tim, Timken; Wis, Wisconsin.

FINAL DRIVE—IG, internal gear; St, straight bevel; Sp, spiral bevel; Wo, worm; 2R, double reduction; Ch, chain; S-T, semi-transverse.

TYPE OF SERVICE BRAKES—

B4IM, Bendix, 4 wheel, internal mechanical); B4MV, Bendix, 4 wheel, mechanical, vacuum; B6IA, Bendix, 6 wheel, internal, air; B4IMV, Bendix, 4 wheel, internal, mechanical, vacuum; BO4IMV, Bendix, own, 4 wheel, internal, mechanical, vacuum; BrIA, Bendix, operating on 4 rear wheels, internal air; BW4IM, Bendix front, Wisconsin rear, 4 wheel, internal, mechanical; BE4IM, Bendix front, Eaton rear, 4 wheel, internal, mechanical; B4IH, Bendix, 4 wheel, internal, hydraulic.

CB4IM, Columbia, Bendix, 4 wheel, internal, mechanical; C4IM, Columbia, 4 wheel, internal, mechanical; K2IM, Clark, 2 wheel, internal, mechanical; CR4IA, Christensen-Relay, 4 wheel internal, air.

L4IHVA, Lockheed, 4 wheel, internal, hydraulic, vacuum, air; LO4ID, Lockheed, own, 4 wheel, internal, drive shaft; LO4IV, Lockheed, own, 4 wheel, internal, vacuum; LT4DV, Lockheed, Timken, 4 wheel, drive shaft, vacuum; L4IH, Lockheed, 4 wheel, internal, hydraulic; L4IHA, Lockheed, 4 wheel, internal, hydraulic, air; L4IHV, Lockheed, 4 wheel, internal, hydraulic, vacuum; LT4IHV, Lockheed, Timken, 4 wheel, internal, hydraulic, vacuum; LT4IVA, Lockheed, Timken, 4 wheel, internal, vacuum, air; L6IHV, Lockheed, 6 wheel, internal, hydraulic, vacuum; L6IH, Lockheed, 6 wheel, internal, hydraulic.

O2IM, Own, 2 wheel, internal, mechanical; O2IV, Own, 2 wheel, internal, vacuum; O4IA, Own, 4 wheel, internal, air; O4IH, Own, 4 wheel, internal, hydraulic; O4IHV, Own, 4 wheel internal, hydraulic, vacuum; O4IM, Own, 4 whcel, internal, mechanical; O4IV, Own, 4 wheel, internal, vacuum; O4M, Own, 4 wheel, mechanical; O2XM, Own, 2 wheel, external, mechanical; O4XM, Own, 4 wheel external, mechanical; O6IA, Own, 6 wheel, internal, air; OJXM, Own, jack shaft, external, mechanical; OL4IHV, Own, Lockheed, 4 wheel, internal, hydraulic, vacuum; OPX, Own, propeller shaft, external; OPXM, Own, propeller shaft, external, mechanical; OPM, Own, propeller shaft, mechanical; ORIV Own, rear wheels, internal, vacuum; OTIHV, Own, Timken, internal, hydraulic, vacuum.

S4IM, Steeldraulic, 4 wheel, internal, mechanical.

T4rIA, Timken, operating on 4 rear wheels, internal, air; T4IA, Timken, 4 wheel, internal, air; T6IA, Timken, 6 wheel, internal, air; T2IMV, Timken, 2 wheel, internal, mechanical, vacuum.

W4I, Westinghouse, 4 wheel, internal; W4IA, Westinghouse, 4 wheel, internal, air; W6IA, Westinghouse, 6 wheel, internal, air; 4IA, 4 wheel, internal, air; 4IH 4 wheel, internal, hydraulic; 4M, 4 wheel, mechanical.

WHEEL BASES given are standard, but optional wheel bases are available in many cases.

***CHASSIS WEIGHT** according to Automotive Daily News formula, which is the chassis with gas, oil, water and spare tire, but without cab or other equipment

TIRES—B, balloon; D, dual; S, solid; P, pneumatic

SPECIAL NOTATIONS

AMERICAN-LA FRANCE

Balloon tires optional Big Chief models.

AUTOCAB

†Engines in these models are located under the driver's seat.

*Six-wheeler.

BROCKWAY

*Models equipped with twin ignition.

CHEVROLET

Utility model availale on 131-inch wheel base with chassis weight of 2,760 pounds and equipped with dual rear wheels.

DIAMOND T

*Six-wheelers.

Additional standard wheel bases available as follows:—

551	158	750	167, 192
504	166½	801	180½, 199¼
506	174	1200	174½, 180
603	157, 179	1600	174½, 180
606	177½	1601	184

DODGE

*Models F40, F41, F61 and F62 can be had with double drop frame.

FEDERAL

*Six-wheelers.

*Also rated in pounds of total allowable weight as follows:

D 3	8500	T 10 W	18,000
E 3	8,500	T 10 D R	18,000
F 7	10,000	U 6	21,000
F 8	11,500	U 6 D R	21,000
A 6	13,500	A 6 S W	18,500
A 6 T	15,000	C 7	24,000
A 6 T W	15,000	C 7 W	24,000
T 3 W	14,000	C 8	24,000
T 8 W F	15,000	C 8 W	24,000
D 2 S W	12,500	X 8	30,000
E 2 S W	12,500	X 8 D R	30,000
D 2 D	12,500	X 8 R	30,000
2 E D	12,500	X 8 R D R	30,000
T 10 B	18,000		

†Both the four and six cylinder are also offered in 157-inch wheel ase at $1,145 and $1,345, respectively.

GENERAL MOTORS TRUCK

*Capacity indicated is the Shraight Rating (combined weight of chassis body, equipment and pay load) for which each chassis is designed and guaranteed to satisfactorily operate under average conditions. The size of the tires used does not affect this Straight Rating, but to secure maximum tire mileage it is suggested that the total gross weight be limited to a "recommended gross weight" for each tire equipment based on tire capacity. Prices cover base chassis and vary with wheel base and tire combinations. The number of wheel base lengths, tire types, range of "recommended gross weights" and resulting pay load range (assuming nominal body allowance) for each model follows:—

Note: Models T-15 to T-61, inclusive, are available for export only as coach chassis.

Model	Wheel Bases	Tire Types	Range of Rec. Gross Weights*	Pay Load Range
T-11	1	1	3800	½
T-15	3	10	4500- 6500	1½-1½
T-18	..	..	7500- 8200	1½-2
T-19	3	..	7500-10000	1½-2½
T-25	3	17	6800- 9000	1½-2
T-26	4	..	8500-11000	2-3
T-30	3	15	10000-12500	2-3
T-31	4	..	11000-14000	2½-4
T-42	4	12	12000-15000	2½-4
T-44	4	12	12000-16000	3-4½
T-45	4	..	13500-16000	3-4½
T-51	4	..	16500-19000	4-5½
T-60	4	18	18500-22000	5-6½
T-61	4	..	19500-22000	5-6½
T-82	4	12	19000-24000	5-7
T-83	4	..	20000-24000	5-7
T-85	3	..	25000-30000	6-8
T-90	3	7	22000-28000	5-7½
T-95	3	..	30000-40000	7-11

Optional rear axle gear ratios available for all models, except Model T-18. Double reduction axles available for Models T-45, T-51, T-60, T-61, T-82, T-83 and T-95.

INDIANA

*Six-wheelers.

INTERNATIONAL

*Stromberg carburetor optional.

MACK

Other wheel bases furnished on all truck models.

On 6-wheel jobs 4 rear wheels driven by chains, foot brake on 4 rear wheels.

††Made also in tractor models.

PIERCE-ARROW

*Optional final drive on Models PW, PX, PY and PZ.

REO

Models DF, FA, FE and FF are available with dual wheels at additional cost.

*Model DF X can be had with 3 speed transmission and single tires for $895.

STERLING

*Six wheelers.

STEWART

Models 30 and 30X can also be supplied in 120, 140 and 160-inch wheel base.

Models 40XA can also be supplied in 134, 145, 160 and 176-inch wheel base.

Model 29XS can be supplied in 135, 160, 176 and 190-inch wheel base.

*Models 18X and 32X can be supplied in 148, 190 and 220-inch wheel base.

*Models 19X, 31X and 27XS can be supplied in 148, 172, 190, 220 and 235-inch wheel base.

As optional equipment Models 18X, 19X, 31X and 27XS can be supplied with Timken dual redcution rear axle.

Models 38-8, 38-6, 48-8 and 58-8 can be supplied in 160, 170, 180, 196, 226 and 241-inch wheel base and worm axle.

WHITE

*Six-wheelers.

CLEVELAND FORD DEALER IN NEW HOME

Cleveland, March 17.—The Searles Motor Company, only Ford dealer in East Cleveland, has moved from 14401 Euclid Ave. to Euclid Avenue at Eddy Road, obtaining greatly increased space for display and service of cars. A large stock of parts will be carried. S. I. Searles is head of the company.

Now DODGE Dealers Challenge the Field of Low-Priced Trucks

1/2 ton delivery $375 chassis f.o.b. factory, Detroit

1½ ton chassis $525 f.o.b. factory, Detroit

2 ton 6-cyl. chassis $795 f.o.b. factory, Detroit

WITH these three modern trucks, Dodge dealers can now match prices with all competitors . . Prices are not simply within $50 or $100 of the lowest in price—they are right down with the lowest.

Not one iota of quality has been sacrificed to place Dodge dealers in this enviable competitive position. Dodge quality is still there and will remain there. Dodge is quality through and through. These modern trucks are thus readily saleable on the sound basis of their proved performance, long life, fine appearance and economy.

The Dodge Six and Eight . . The Plymouth . . . Dodge Trucks, School Buses and Taxicabs . . . Three profit-earning lines for Dodge dealers. The three together, an unbeatable combination.

For all the facts write with assurance of confidential attention, to A. vanDerZee, General Sales Manager, Dodge Brothers Corporation, Detroit, Michigan.

DODGE DEPENDABILITY